4.5 TRAFFIC/ACCESS

1. *SUMMARY*

This section presents an analysis of the impacts of the proposed project relative to traffic/access. The analysis presented here is based upon the traffic technical report prepared for the proposed Mission Village project by Austin-Foust Associates, Inc., (AFA) dated October 1, 2010, as supplemented by the following technical memoranda: Mission Village Traffic Impact Analysis - Supplemental Freeway Analysis, AFA (November 16, 2010); Long-Range Buildout Conditions Without Potrero Canyon Road Bridge, AFA (February 22, 2011); Mission Village Traffic Impact Analysis - Existing Plus Project Scenario, AFA (March 1, 2011); Mission Village (Newhall Ranch) I-5 Share Calculations, AFA (March 8, 2011); Mission Village Revised Project Trip Generation Estimates, AFA (March 8, 2011); and Mission Village - Responses to Comments Analysis, AFA (April 29, 2011). A copy of the AFA Traffic Impact Analysis is included in ***Appendix 4.5*** *of the~~is~~ Draft EIR. A copy of each of the supplemental AFA technical memoranda is included in Final EIR,* ***Appendix F4.5****. ~~which is included in its entirety in **Appendix 4.5** of this EIR.~~*

a. Construction Impacts

During construction of the Mission Village project, trucks to deliver construction equipment and building supplies and to haul away demolition debris potentially would disrupt traffic on local roadways resulting in a short-term impact that could adversely affect regional or local roadway operations. With implementation of traffic management controls for construction vehicles where necessary, no significant traffic impacts associated with construction of the project would occur.

b. Operational Impacts

At project buildout, which is anticipated in Year 2021, Mission Village would generate approximately 58,000 average daily vehicle trips. Consistent with County of Los Angeles, City of Santa Clarita, and Caltrans traffic impact analysis guidelines, the impacts of the proposed project relative to the capacity of the surrounding roadways were analyzed under ~~three~~ four different scenarios: (1) existing plus ambient plus project conditions, (2) 2021 project buildout cumulative conditions, ~~and~~ (3) long-range (2035) cumulative conditions; and (4) existing plus project conditions.

Under existing plus ambient plus project conditions, the project plus ambient traffic would result in significant impacts at the Commerce Center Drive and State Route (SR) 126, and The Old Road and McBean Parkway intersections. Mitigation is proposed that would reduce the identified impacts to a level below significant.

Under 2021 project buildout cumulative conditions, the project, in combination with cumulative traffic, would result in significant impacts at the following intersections (the applicable jurisdiction is listed in parenthetical):

- *Interstate (I) 5 SB Ramps & Henry Mayo Drive (SR-126) (Caltrans/County)*
- *I-5 SB Ramps & Valencia Boulevard (Caltrans/County)*
- *The Old Road & Rye Canyon Road (County)*
- *The Old Road & McBean Parkway (County)*
- *McBean Parkway & Magic Mountain Parkway (City)*
- *McBean Parkway & Newhall Ranch Road (City)*
- *Orchard Village Road & McBean Parkway (City)*
- *Bouquet Canyon Road & Newhall Ranch Road (City)*
- *Commerce Center Drive & SR-126 (County)*

Mitigation in the form of roadway capacity improvements is proposed that would reduce the identified impacts to a level below significant.

Lastly, under long-range (2035) cumulative conditions, the project would contribute to significant long-term cumulative impacts at the following intersections:

- *I-5 SB Ramps & SR-126 (Caltrans/County)*
- *The Old Road & I-5 SB Ramps (Caltrans/County)*
- *I-5 SB Ramps & Magic Mountain Parkway (Caltrans/County)*
- *I-5 NB Ramps & Magic Mountain Parkway (Caltrans/City)*
- *I-5 SB Ramps & Valencia Boulevard (Caltrans/County)*
- *I-5 SB Ramps & McBean Parkway (Caltrans/County)*
- *I-5 SB Ramps/Marriott Way & Pico Canyon Road (Caltrans/County)*
- *I-5 NB On/Off & Lyons Avenue (Caltrans/City)*
- *The Old Road & Rye Canyon Road (County)*
- *The Old Road & Magic Mountain Parkway (County)*
- *The Old Road & McBean Parkway (County)*
- *Tourney Road & Magic Mountain Parkway (City)*

- *McBean Parkway & Magic Mountain Parkway (City)*
- *McBean Parkway & Newhall Ranch Road (City)*
- *Wiley Canyon Road & Lyons Avenue (City)*
- *Orchard Village Road & Wiley Canyon (City)*
- *Orchard Village Road & McBean (City)*
- *Valencia Boulevard & Magic Mountain Parkway (City)*
- *Bouquet Canyon Road & Newhall Ranch Road (City)*
- *Commerce Center Drive & SR-126 (County/Caltrans)*

Mitigation in the form of capacity improvements is proposed that would reduce the project's contribution to the identified impacts to a level below significant.

No significant impacts would occur to Congestion Management Program (CMP) intersections or CMP freeway segments, or to the I-5 mainline. With respect to transit, the project potentially would increase demand for transit ridership beyond the capacity of existing services, thereby resulting in a potentially significant impact. Mitigation is proposed that would reduce the identified impacts to a level below significant.

Under existing plus project conditions, which is a hypothetical scenario that assumes immediate full project buildout and does not account for cumulative traffic growth and future roadway improvements and, therefore, is presented for information purposes only, the project would result in significant impacts at the following intersections and freeway segments:

- *The Old Road & Rye Canyon Road (County [impacts mitigated by EIR mitigation])*
- *McBean Parkway & Magic Mountain Parkway (City [impacts mitigated by EIR mitigation])*
- *McBean Parkway & Newhall Ranch Road (City [impacts mitigated by EIR mitigation])*
- *Bouquet Canyon Road & Newhall Ranch Road (City [impacts mitigated by EIR mitigation])*
- *Commerce Center Drive & SR-126 (Caltrans/County [impacts mitigated by EIR mitigation])*
- *Southbound I-5 between Calgrove & SR-14 (Caltrans [impacts mitigated by I-5 Improvement Project])*
- *I-5 South of SR-14 between SR-14 and I-210 (Caltrans [impacts mitigated by completion of I-5/SR-14 Direct HOV Connector project])*

As noted, the impacts identified under this scenario would be mitigated to a level below significant with implementation of EIR mitigation improvements, or improvements presently being constructed or programmed for construction.

2. BACKGROUND

a. Relationship of Project to Newhall Ranch Specific Plan Program EIR

Section 4.8 of the Newhall Ranch Specific Plan Program EIR identified and analyzed the existing conditions, potential impacts, and mitigation measures associated with Traffic/Access for the entire Newhall Ranch Specific Plan. The County, in its findings and in a revised Mitigation Monitoring Plan, adopted the Newhall Ranch mitigation program for the Specific Plan. The Newhall Ranch Specific Plan Program EIR concluded that Specific Plan implementation would result in significant impacts, but that the identified mitigation measures would reduce the impacts to below a level of significance. All subsequent project-specific development plans and tentative subdivision maps must be consistent with the Newhall Ranch Specific Plan, adopted May 2003, the County of Los Angeles General Plan, and the Santa Clarita Valley Areawide Plan.

This project-level EIR is tiering from the previously certified Newhall Ranch Specific Plan Program EIR. **Section 4.5** assesses, at the project level, the existing conditions for the Mission Village site, the project's potential environmental impacts on transportation and access, and the applicable mitigation measures from the Newhall Ranch Specific Plan Program EIR, as well as additional mitigation measures recommended by this EIR specific to the Mission Village project impacts.

b. References

The traffic impacts analysis presented in this section is based on the *Mission Village Traffic Impact Analysis*, October 1, 2010, (Traffic Impact Analysis) prepared by AFA, *as supplemented by the following technical memoranda: Mission Village Traffic Impact Analysis - Supplemental Freeway Analysis, AFA (November 16, 2010); Long-Range Buildout Conditions Without Potrero Canyon Road Bridge, AFA (February 22, 2011); Mission Village Traffic Impact Analysis - Existing Plus Project Scenario, AFA (March 1, 2011); Mission Village (Newhall Ranch) I-5 Share Calculations, AFA (March 8, 2011); Mission Village Revised Project Trip Generation Estimates, AFA (March 8, 2011); and Mission Village - Responses to Comments Analysis, AFA (April 29, 2011).* A copy of the AFA Traffic Impact Analysis is included in **Appendix 4.5** of the~~is~~ Draft EIR. A copy of each of the supplemental AFA technical memoranda is included in Final EIR, **Appendix F4.5**. Source documents relied upon by AFA in preparation of the traffic study include the *Westside Santa Clarita Valley Roadway Phasing Analysis*, AFA, November 2006, and the *Westside Santa Clarita Valley Phasing Analysis for the City of Santa Clarita*, AFA July 2006.

3. SUMMARY OF THE NEWHALL RANCH SPECIFIC PLAN PROGRAM EIR FINDINGS

The Specific Plan contains a backbone circulation plan that identifies the roadway and circulation improvements required to support buildout of uses allowed by the Specific Plan. As approved, the Newhall Ranch Specific Plan would generate 357,000 average daily trips (ADT), of which 211,300 are accounted for by residential land use while the remainder represents non-residential land uses.

The Newhall Ranch Specific Plan Program EIR, and related findings, determined that buildout of the Specific Plan would cause a significant off-site impact along 19 separate arterial roadways and two state highways: SR-126 and I-5, as well as the SR-126/I-5 interchange. These impacts extended along SR-126 into Ventura County. Specific to freeway/highway interchanges and intersections, prior to mitigation, the Specific Plan caused significant impacts at the following locations:

- Valencia Boulevard at I-5 Interchange
- Magic Mountain Parkway at I-5 Interchange
- SR-126/Chiquito Canyon Intersection
- SR-126/Wolcott/Franklin Avenue Intersection
- SR-126/Commerce Center Drive Intersection

A number of mitigation measures were identified to address the significant impacts. For example, each subdivision filed within the Specific Plan must undergo a transportation performance evaluation that identifies the specific improvements for all on-site roadways, which are necessary to provide adequate roadway and intersection capacity as well as adequate right-of-way for the subdivision and other expected traffic. Based on the Newhall Ranch Specific Plan Program EIR and the entire record, the County's Board of Supervisors found that the identified significant impacts on traffic/access were mitigated to below a level of significance by adoption of specified mitigation.[1]

4. METHODOLOGY

The following provides an overview of the methodology utilized by the traffic engineers to conduct the impacts analysis presented in this section.

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1 See Mitigation Measure 4.8-1 through 4.8-13 in both the certified Newhall Ranch Specific Plan Program EIR and the adopted Mitigation Monitoring Plan for the Specific Plan (May 2003).

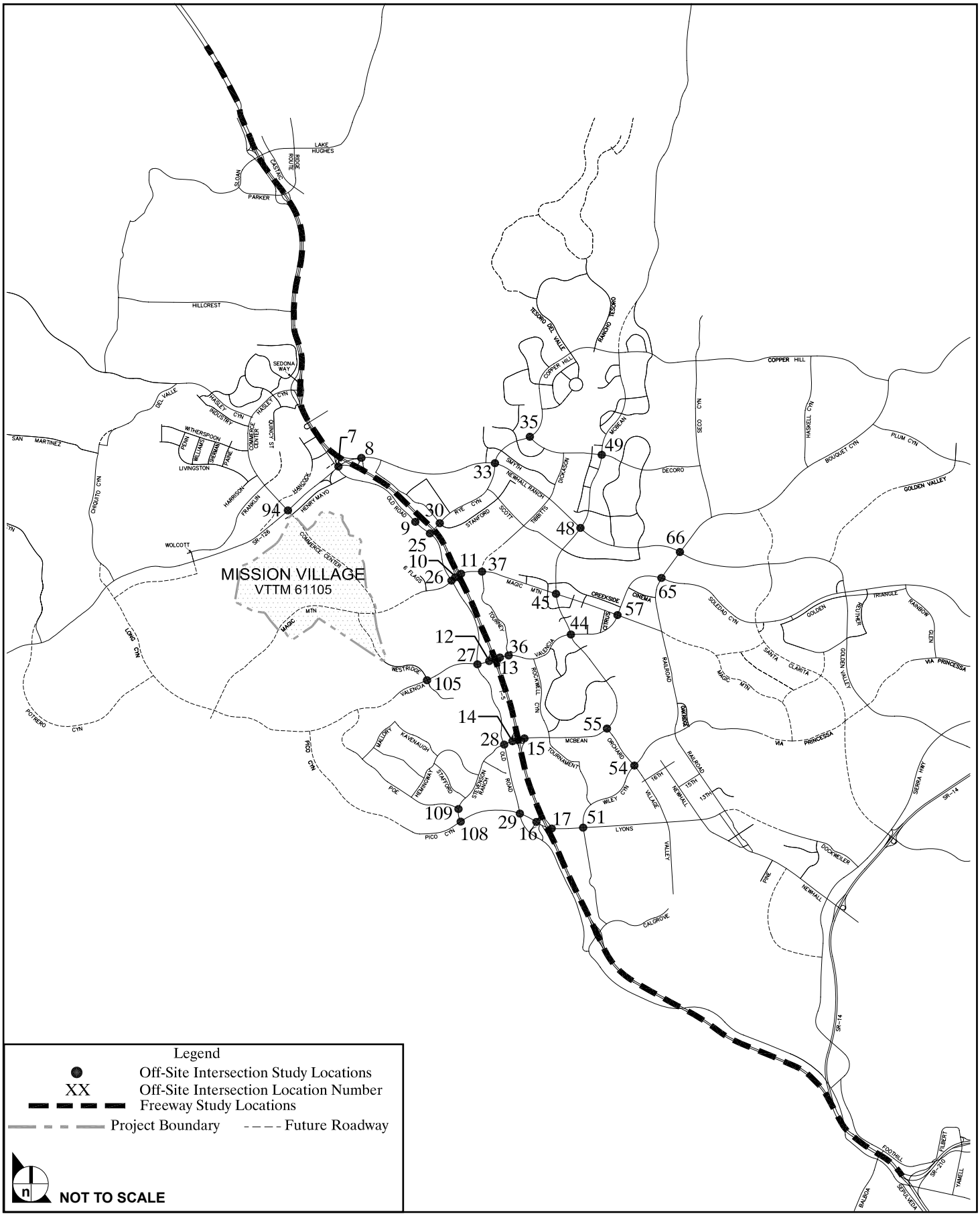
a. Definitions

The following definitions are provided for certain terms used throughout this section to clarify their intended meaning:

ADT	Average Daily Traffic. Generally used to measure the total two-directional traffic volumes passing a given point on a roadway.
CMP	Congestion Management Program. A state-mandated program administered by the Los Angeles County Metropolitan Transportation Authority (Metro) that provides a mechanism for coordinating land use and development decisions.
ICU	Intersection Capacity Utilization. A measure of the volume to capacity ratio for an intersection. Typically used to determine the peak hour level of service for a given set of intersection volumes.
LOS	Level of Service. A scale used to evaluate circulation system performance based on intersection ICU values or volume/capacity ratios of arterial and freeway segments.
Peak Hour	This refers to the hour during the AM peak period (typically 7:00 AM–9:00 AM) or the PM peak period (typically 3:00 PM–6:00 PM) in which the greatest number of vehicle trips are generated by a given land use or are traveling on a given roadway.
Tripend	A trip generation measure which represents the total trips entering and leaving a location; each trip has two tripends.
V/C	Volume to Capacity Ratio. This is typically used to describe the percentage of capacity utilized by existing or projected traffic on a segment of an arterial or intersection.
VPH	Vehicles Per Hour. Used for roadway volumes (counts or forecasts) and trip generation estimates. Measures the number of vehicles in a 1-hour period, typically the AM or PM peak hour.
VPHPL	Vehicles Per Hour Per Lane. Similar to VPH but with the roadway volume averaged to the total number of roadway lanes.

b. Project Study Area

The project study area, illustrated in **Figure 4.5-1, Project Study Area**, includes the roadways and intersections within and near the project site where project-generated traffic could cause a significant impact. As shown on **Figure 4.5-1**, the project study area generally extends to Chiquito Canyon Road/Long Canyon Road to the west, SR-126 to the north, Bouquet Canyon Road to the east, and Pico Canyon/Lyons Road to the south. The study area intersections are numbered based on the Santa Clarita Valley Consolidated Traffic Model (SCVCTM), the traffic planning computer model used in the preparation of this analysis. See **subsection 4.d.**, below. The I-5 study area extends from Lake Hughes in the north to south of SR-14 in the south, and the SR-126 study area from I-5 in the east to west of Commerce Center.



SOURCE: Austin-Foust Associates, Inc. – August 2010

FIGURE **4.5-1**

Project Study Area

The study area includes a number of future new arterial roadways, and roadways for which improvements are currently programmed or planned. For the purpose of determining project impacts to the arterial roadways under the existing plus ambient plus 2021 project buildout scenario, only those roadways and improvements that will be constructed as part of the project (i.e., the extensions of Magic Mountain Parkway, Westridge Parkway, and Commerce Center Drive) are included in the background conditions. For the evaluation of long-range (2035) cumulative conditions, future roadways to be constructed by cumulative projects are included as part of the cumulative analysis.

c. Impacts Analysis Scenarios

The traffic impacts of the proposed project are evaluated based on multiple project buildout scenarios, consistent with the established guidelines of the respective jurisdictions. For roadways within the County of Los Angeles, impacts are assessed utilizing the guidelines of the Los Angeles County Department of Public Works;[2] for locations within the City of Santa Clarita, the analysis follows the City's established guidelines for analysis.[3] For impacts to state highway facilities, impacts were assessed consistent with the Caltrans guidelines for the preparation of traffic studies.[4]

Based on these guidelines, traffic impacts were assessed under the following three scenarios:

1. Existing Conditions plus Ambient Growth, and Existing Conditions plus Ambient Growth plus Project
2. Year 2021 Cumulative Conditions without and with Project
3. Year 2035 Cumulative Buildout Conditions without and with Project
4. Existing Conditions plus Project

The County's traffic study guidelines specify the analysis of Scenario 1, Existing Conditions plus Ambient Growth plus Project. The County's requirement for an evaluation of Existing Conditions plus Ambient Growth plus Project plus Related Projects (i.e., cumulative projects) is addressed by Scenarios 2 and 3. The City of Santa Clarita's traffic study guidelines specify the analysis of Scenario 2 for the determination of project impacts. As such, Scenario 1 is not considered for intersections under the jurisdiction of the City of Santa Clarita, as they represent a hypothetical scenario that is considered exclusively by the County. Similarly, Scenario 4 represents a hypothetical scenario as it assumes immediate full project buildout and does not account for cumulative traffic growth and future roadway improvements and, therefore, is provided for information purposes only.

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2 County of Los Angeles Department of Public Works, *Traffic Impact Analysis Report Guidelines*, January 1997.

3 City of Santa Clarita, *Preliminary Traffic Impact Report Guidelines*, August 1990.

4 *Guide for the Preparation of Traffic Impact Studies*, Caltrans, December 2002.

d. Ambient Growth and Cumulative Conditions

In assessing impacts under the Existing plus Ambient plus Project scenario, horizon year conditions are derived using actual traffic volumes based on existing traffic counts collected in 2009 and 2010, plus a growth factor of 2.0 percent per year to account for background growth in ambient traffic calculated through project buildout year 2021.

In assessing impacts under the 2021 and 2035 cumulative scenarios, since the Santa Clarita Valley is a rapidly growing area with numerous proposed, approved and pending projects, the Cumulative Conditions with Project Scenarios are based on forecasts derived using the SCVCTM. The SCVCTM is a traffic planning computer model and the principal tool for transportation planning in the Santa Clarita Valley. The model was developed jointly by the City of Santa Clarita and the County of Los Angeles Public Works Department to provide traffic forecasts for transportation planning in the valley. The model analyzes expected or possible projects based on actual development applications and general plan provisions, and predicts traffic impacts based on various assumptions for different periods as the valley builds out.

The SCVCTM is updated regularly as specific development projects are proposed. Pending, recorded, and approved projects are incorporated into the Long-range Buildout/Cumulative database. A partial listing of these known cumulative projects that are in the vicinity of the project site is provided in **Table 4.5-1, Defined Projects Included in the Cumulative Database**. Where future development will occur but specific projects have not been designated, the SCVCTM Long-range Buildout/Cumulative database includes land use projects based on the allowable uses shown in the proposed County Area Plan and City General Plan update, One Valley One Vision.

Table 4.5-1
Defined Projects Included in the Cumulative Database

No.	Name and/or Location	Description
1	Landmark Village/Tract 53108 – South of SR-126 at Wolcott & Chiquito Cyn Road (Part of Approved Newhall Ranch Specific Plan)	1,444 du Residential (308 Single Family, 1,136 Multi-Family) 1,033 tsf Commercial
2	Legacy Village/Tract 61996 – West of I-5, North of Pico Canyon, South of Six Flags Magic Mtn.	3,455 du Residential (536 Single Family, 1,574 Condominium/Townhome, 1,345 Senior Active) 186 tsf Commercial Retail 316 tsf Commercial Office 337 tsf Congregate Care Facility
3	Entrada/Tract 53295 – West of The Old Road, North of Valencia Boulevard, East of the proposed Legacy Village/Mission Village development	1,640 du Residential (408 Single Family, 1,232 Condominium) 290 tsf Commercial Retail 436 tsf Commercial Office Elementary School

No.	Name and/or Location	Description
4	Homestead/Tract 60678 – West of the proposed Mission Village development, west and south of the proposed Landmark development, as well as south of the existing Val Verde community (via extensions of Valencia Boulevard and Magic Mountain Parkway, as well as intersections with State Route-126) (Part of Approved Newhall Ranch Specific Plan)	5,777 du Residential (965 Single Family, 4,812 Condominium/Townhome) 1,310,000 tsf Commercial
5	PM 18108 – West of The Old Road, north of SR-126 (Part of Approved Valencia Commerce Center CUP 87-360)	3,500 tsf (including existing) Industrial/Business park at Buildout
6	Tract 60030 – West of Commerce Center Drive (via extension of Witherspoon Pkwy	1,221.36 tsf Industrial Park
7	Tract 60257 – East of Del Valle Road	233 du 30 tsf Commercial Retail
8	Tract 60665 – East of Del Valle Road	7 du
9	Tract 52475 – North of Hasley Canyon Road, west of Del Valle Road	46 du
10	Tract 53725 – North of Hasley Canyon Road, west of Sloan Cyn Road	42 du
11	PM 18654 – West of The Old Road, north of Magic Mtn. Parkway	200 tsf Office Building (under construction)
12	Northlake Phase 1/Tract 51852 – North of Lake Hughes Road, east of Ridge Route Road	1,696 du Middle School
13	Castaic High School – North of Lake Hughes Road, east of Ridge Route Road	3,000 Students
14	Riverpark/Tract 53425 – North and south of Santa Clara River, terminus of Newhall Ranch Road, south of Bouquet Cyn Road and north of Soledad Cyn Road	439 SF du 650 MF du 16 Thousand Square Feet (tsf) of Commercial Uses (under construction)
15	Heritage Hills/Tract 65806 – Northwest and southwest corner of Dockweiler and Sierra Highway	190 SF du
16	UCLA Film Archives – North of McBean Pkwy and west of Rockwell Cyn Road	250 tsf Commercial Office (under construction)
No.	Name and/or Location	Description
17	College of the Canyons Expansion – South of Valencia Blvd and west of Rockwell Cyn Road	28 tsf Commercial Office 6,500 Students (additional)
18	Gate-King Industrial Park – South of San Fernando Road, west of Sierra Hwy	4,200 tsf Industrial Park
19	Milestone/Tract 61811 – North side of Golden Valley Road at Robert C. Lee Pkwy	167 SF du (33 total acres) (under construction)
20	Porta Bella/Whittaker-Bermite (partial) – South side of Soledad Cyn Road and east of Circle J Ranch area	1,244 SF du 1,667 MF du 2,911 tsf of Commercial Uses 448.7 Acres of Open Space (approximately 50% of total project shown above is included in the interim year horizon)
21	Lyons Ranch/Tract 53653 – West of I-5 and south of Calgrove Blvd	95 SF du 95 Senior Housing

No.	Name and/or Location	Description
22	Tract 62595 – South of Friendly Valley, north of Golden Valley Rd and terminus of Avenue of the Oaks	33 MF du
23	Northwest corner of Golden Valley Road and McKeon Drive	105 tsf of Commercial Uses
24	Tract 53419 – North of Golden Valley Road and northwest of Sierra Highway	111 MF du
25	Downtown Newhall Specific Plan area	712 net new du (1,402 total du) 297.1 net new tsf (1,107.4 total tsf)
26	North Newhall Specific Plan area	628 du–673 du 585 tsf–840 tsf Non-Residential 1 Elementary School (673 du, 632.5 tsf, 1 Hotel and 1 Elem. School included in the interim year horizon)
27	Golden Valley Ranch/Tract 52414 – South of SR-14, north of Placerita Cyn Road and west of Sand Cyn Road	498 SF du 618.8 tsf of Commercial Uses 1 Elementary School (under construction)
28	Bridgeport Market Place – Northeast corner of McBean Pkwy and Newhall Ranch Road	130 tsf of Commercial Uses 30 tsf Church 5 Acre Park (under construction)
29	The Keystone – Northeast portion of the future intersection of Newhall Ranch Road and Golden Valley Road	319 SF du 180 MF du
30	Soledad Circle Estates – South of Soledad Cyn Road at Penlon Court	147 SF du
31	Soledad Village – South of Santa Clara River, north of Soledad Cyn Road at Gladding Way	407 Condo du (incl. 22 live/work units) 8 tsf of Commercial Uses
32	Henry Mayo Newhall Memorial Hospital Master Plan	127.4 net new tsf of Hospital 200.0 net new tsf of Medical Office
33	Town Center Mall Expansion	490 tsf of Commercial Uses
34	The Masters College Expansion	600 Students 54 Condominium du

Sources:
Westside Santa Clarita Valley Roadway Phasing Analysis
Sterling Industrial – VTPM 060030 Traffic Impact Analysis
Northlake Phase 1 Traffic Impact Analysis
City of Santa Clarita Planning Division
Downtown Newhall Specific Plan
Draft North Newhall Specific Plan Land Use Matrix
Henry Mayo Newhall Memorial Hospital Master Plan Traffic Impact Analysis
Town Center Mall Expansion Traffic Impact Analysis
Masters College Master Plan Traffic Impact Analysis
Note: The buildout/2035 setting also includes planned future development in accordance with the land uses defined in the proposed One Valley One Vision County Area Plan/City General Plan update.

Because the SCVCTM is developed from regional models prepared by the Southern California Association of Governments (SCAG), it also forecasts traffic in a regional context. This means that not only are trips to and from the Santa Clarita Valley included in the forecasts, but trips that pass through the valley also are included. As part of the development of this traffic impact analysis, an update to the traffic model was prepared which involved a review of current related project information from both the City and County. The SCVCTM land use database was then updated where necessary in order to include the most current information.

e. Westside Roadway Phasing Analysis

In conjunction with the development of this traffic impact analysis, a special comprehensive phasing study, the *Westside Roadway Phasing Analysis*, was prepared to address the cumulative development of all planned projects west of the I-5 freeway.[5] The phasing analysis identifies the specific roadway and intersection improvements needed to mitigate the cumulative impacts of the Westside projects, and was approved by the County in May 2007 for use as a supporting document for traffic studies such as the AFA Traffic Impact Analysis. The subject area of the phasing analysis, referred to here as the Westside of the Santa Clarita Valley, evaluates the phased development of Mission Village, the entirety of the Newhall Ranch Specific Plan area, the Entrada project, the Legacy Village project, as well as buildout of the Valencia Commerce Center business/industrial park area, as these areas build out over the next 25 years. All together, these projects represent the development of over 27,000 residential dwelling units and over 11 million square feet of commercial uses. Along with the phased development of the Westside projects, the phasing analysis incorporates the other anticipated developments outside of the Westside area, as well as the buildout of the remaining portions of the Santa Clarita Valley as allowed by the City and County's General Plans.

The *Westside Roadway Phasing Analysis* is the most comprehensive roadway planning effort prepared to date for the Santa Clarita Valley and, as such, is referenced by this analysis as the source of cumulative traffic data forecasts, and the identification and timing of roadway improvements. Periodic updates of the phasing study will be prepared, the purpose of which is to ensure that the roadway improvements occur when needed and based on the actual development activity as it changes over time. The development timeline of the Westside area will evolve based on several factors such as economic conditions and consumer driven requirements, and periodic updates of the phasing study will allow the timing of the roadway improvements to be prioritized based on the actual land development activity as it occurs.

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5 Austin-Foust Associates, Inc. (AFA), *Westside Santa Clarita Valley Roadway Phasing Analysis*, November 2006; and AFA, *Westside Santa Clarita Valley Phasing Analysis for the City of Santa Clarita*, July 2006, are collectively referred to as the *Westside Roadway Phasing Analysis*.

f. Levels of Service Descriptions

Level of service (LOS) is a concept developed to quantify the degree of comfort afforded to drivers as they travel on a given roadway. The degree of comfort includes such elements as travel time, number of stops, total amount of stopped delay, etc. As defined in the Transportation Research Board, National Research Council's *Highway Capacity Manual* (HCM 2000), six grades are used to denote the various LOS and are denoted as A through F. **Table 4.5-2, Level of Service of Arterial Roads**, and **Table 4.5-3, Level of Service Descriptions – Freeway Segments**, describes the six grades of LOS for these respective facilities. Please refer to **subsection 8a, Significance Threshold Criteria**, for the specific methods of calculating the LOS for arterial roads and freeways in the project study area.

Table 4.5-2
Level of Service of Arterial Roads[1]

LOS	Description
A	LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the given street class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.
B	LOS B describes reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the street class. The ability to maneuver within the traffic stream is only slightly restricted, and control delays at signalized intersections are not significant.
C	LOS C describes stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the free-flow speed for the street class.
D	LOS D borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40 percent of free-flow speed.
E	LOS E is characterized by significant delays and average travel speeds of 33 percent or less of the free-flow speed. Such operations are caused by a combination of adverse signal progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.
F	LOS F is characterized by urban street flow at extremely low speeds, typically one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

Source: Highway Capacity Manual 2000, Transportation Research Board, National Research Council.

[1] *The average travel speed along an urban street is the determinant of the operating LOS. The travel speed along a segment, section, or entire length of an urban street is dependent on the running speed between signalized intersections and the amount of control delay incurred at signalized intersections. The following general statements characterize LOS along urban streets and show the relationship to free flow speeds (FFS).*

Table 4.5-3
Level of Service Descriptions – Freeway Segments

LOS	Description
A	LOS A describes free-flow operations. Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed at this level.
B	LOS B represents reasonably free flow, and free-flow speeds are maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.
C	LOS C provides for flow with speeds at or near the free-flow speed of the freeway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service will be substantial. Queues may be expected to form behind any significant blockage.
D	LOS D is the level at which speeds begin to decline slightly with increasing flows and density begins to increase somewhat more quickly. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.
E	At its highest density value, LOS E describes operation at capacity. Operations at this level are volatile, because there are virtually no usable gaps in the traffic stream. Vehicles are closely spaced, leaving little room to maneuver within the traffic stream at speeds that still exceed 49 miles per hour. Any disruption of the traffic stream, such as vehicles entering from a ramp or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing. Maneuverability within the traffic stream is extremely limited, and the level of physical and psychological comfort afforded the driver is poor.
F	LOS F describes breakdowns in vehicular flow. Such conditions generally exist within queues forming behind breakdown points. LOS F operations within a queue are the result of a breakdown or bottleneck at a downstream point. LOS F is also used to describe conditions at the point of the breakdown or bottleneck and the queue discharge flow that occurs at speeds lower than the lowest speed for LOS E, as well as the operations within the queue that forms upstream. Whenever LOS F conditions exist, they have the potential to extend upstream for significant distances.

Source: Highway Capacity Manual 2000, Transportation Research Board, National Research Council
LOS = Level of Service

g. Trip Generation

Trip generation for a project is based upon the amount and type of future land use proposed in an area and requires that future land uses be broken down into specific units, such as square feet of floor area, number of dwelling units, etc. Vehicle trip generation estimates for the project in this case were calculated using the SCVCTM and the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 8th Edition,

which is one of the most widely accepted trip generation rate sources. The results of the trip generation are calculated as "tripends," which are defined as the total trips entering and leaving a given location. Due to the complementary mix of land uses planned for the site, many of the trips generated by the project will remain internal to the project site. To derive the amount of trips internal to the project site, a mixed-use development (MXD) trip generation estimate has been prepared for the project by Fehr & Peers based on a quantitative model developed in cooperation with the U.S. Environmental Protection Agency (U.S. EPA) and ITE. The MXD trip generation estimate is addressed in further detail below.

h. Trip Distribution

The geographic distribution of vehicle trips generated by the Mission Village project was determined using the updated SCVCTM. As noted above, the SCVCTM is a computerized travel demand model that utilizes a sophisticated trip distribution function to derive the distribution of vehicle trips and has been calibrated to the existing conditions for the Santa Clarita Valley. Production and attraction trip data is generated by the model based on five separate trip purposes, and trip distribution patterns are then derived by the model. As a final step, the model assigns the trips to the roadway network based on the derived distribution patterns. The process by which the project trips are distributed on the area roadways is discussed in further detail below.

i. Planned Roadway Improvements

The Los Angeles County Highway Plan (formerly known as the Master Plan of Highways), which depicts the general location of planned highway routes throughout the County, and the Newhall Ranch Specific Plan include future roadways near and within the project site. These plans designate the extension of Magic Mountain Parkway within the project site as a six lane Major Highway for the segment east of Westridge Parkway and a four lane Secondary Highway for the segment west of Westridge Parkway. Additionally, an extension of Commerce Center Drive currently is designated within the project as a six lane Major Highway. Finally, the extension of Westridge Parkway within the project site has been planned as a four lane collector roadway.

The I-5 Freeway currently is built to eight lanes, and Caltrans and the Metropolitan Transportation Authority (Metro) have approved a project to expand the freeway to include high-occupancy vehicle (HOV) and truck lanes. In September 2009, Caltrans approved a Final Environmental Impact Report/Environmental Assessment for the I-5 HOV/Truck Lanes Project SR-14 to Parker Road. The project will add (1) one HOV lane in each direction on I-5 from the SR-14 interchange north to Parker Road, (2) truck climbing lanes in each direction from the SR-14 interchange to Calgrove Boulevard (northbound) and Pico Canyon Road/Lyons Avenue (southbound), and (3) full auxiliary lanes within portions of the

Project study area. Caltrans expects construction of the improvement project will be completed in 2016. Relevant excerpts of the Caltrans EIR/EIS are included in this EIR, **Appendix 4.5**.

5. REGULATORY SETTING

a. Congestion Management Program

The CMP was enacted by the California Legislature in 1989 to improve traffic congestion in urban areas. The program became effective with the passage of Proposition 111 in 1990, which also increased the state gas tax. Funds generated by Proposition 111 are available to cities and counties for regional road improvements, provided these agencies are in compliance with CMP requirements. The intent of the legislation was to link transportation, land use, and air quality decisions by addressing the impact of local growth on the regional transportation system. State statute requires that a CMP be developed, adopted, and updated for every county that includes an urbanized area, which shall include every city and county government within that county.

Under this legislation, regional agencies are designated within each county to prepare and administer the CMP for agencies within that county. Each local planning agency included in the CMP has the following responsibilities:

- Assisting in monitoring the roadways designated within the CMP system
- Adopting and implementing a trip reduction and travel demand ordinance
- Analyzing the impacts of local land use decisions on the regional transportation system
- Preparing annual deficiency plans for portions of the CMP system where level-of-service standards are not maintained

Metro is the CMP agency for Los Angeles County. Metro has the responsibility to review compliance with the CMP by agencies under its jurisdiction. For any agency out of compliance, after receiving notice and after a correction period, a portion of State gas tax funds may be withheld if compliance is not achieved. In addition, compliance with the CMP is necessary to preserve eligibility for state and federal funding of transportation projects.

Metro adopted the County's first CMP in 1992, and completed its most recent update in 2004. The CMP statute requires that all state highways and principal arterials be included within the CMP roadway system. Within the Santa Clarita Valley, the following roadways are designated as CMP roadways:

- I-5 Freeway
- SR-14 Freeway

- Sierra Highway from Newhall Avenue (formerly San Fernando Road) to SR-14 at Red Rover Mine Road
- Magic Mountain Parkway from I-5 to Railroad Avenue (formerly San Fernando Road)
- Railroad Avenue/Newhall Avenue (formerly San Fernando Road) from Magic Mountain Parkway to SR-14
- SR-126 west of the I-5 freeway

Various strategies are available to local jurisdictions to mitigate CMP traffic impacts, including constructing new roadway improvements, managing traffic flow through signal improvements and trip reduction measures, and land use strategies such as locating higher density uses in proximity to public transit.

b. Bicycle Plans

The Metro Board adopted the Metro Bicycle Transportation Strategic Plan in 2006 to promote bicycle use throughout Los Angeles County. The Plan's vision is to make cycling a viable travel choice by promoting links between bicycle facilities and the transit network. The plan identifies four "bike-transit" hubs within the Santa Clarita Valley: the three Metrolink commuter rail stations in the Valley (Newhall, Santa Clarita, Via Princessa), and the McBean Transfer Station. The Metro Bicycle Transportation Strategic Plan evaluated gaps in the inter-jurisdictional bikeway network connecting cities and unincorporated areas to destinations and transit stops. Within the Santa Clarita Valley, four gaps in the inter-jurisdictional bikeway network were identified: The Old Road, SR-126, Castaic/San Francisquito Creek, and Sierra Highway corridors.

The County of Los Angeles is in the process of updating the County's adopted Plan of Bikeways (1975), a sub-element to the County General Plan. The bike plan seeks to encourage the use of bicycles as a general means of transportation, ensure the safety of bicycle users, and provide guidelines for the development, expansion, and implementation of the County's bicycle infrastructure. The plan covers bicycling issues in all unincorporated areas within the County of Los Angeles, and it also will study the potential for new and improved bike paths along flood control facilities (e.g., rivers, creeks, etc.).

c. Bridge and Thoroughfare Districts

Within the Santa Clarita Valley, Los Angeles County and the City of Santa Clarita have established Bridge & Thoroughfare (B&T) Districts to manage and fund the roadway improvements planned to occur within the Valley. Under the B&T District mechanism, the adoption of a specific area of benefit permits the county and city to levy a fee against future development located within the area of benefit for the

improvement of arterial highways. This funding method assesses developments, which create the need for additional improvements, for the additional costs associated with constructing the necessary roadway improvements. The charge is levied in proportion to the estimated number of trips generated by the development.

Existing B&T Districts located in the project study area include the Valencia and Via Princessa B&T Districts. Each of these districts is a full mitigation district, which means that the collected B&T fees, combined with other funding sources (e.g., state and federal funds, gas and sales taxes, etc.), have been calculated to cover the full cost of all improvements necessary to construct the arterial roadway network as described in the respective county and city general plan transportation elements. The site of the proposed project is not located within an established B&T District, although a new district, i.e., the Westside B&T District, is in the process of being formed, which would include the proposed project and other Westside development.

d. Traffic Guidelines

As noted above, the traffic impacts of the proposed project are evaluated based on multiple project buildout scenarios, consistent with the established guidelines of the respective jurisdictions. For roadways within the County of Los Angeles, impacts are assessed utilizing the guidelines of the Los Angeles County Department of Public Works;[6] for locations within the City of Santa Clarita, the analysis follows the City's established guidelines for analysis.[7] For impacts to state highway facilities, impacts were assessed consistent with the Caltrans guidelines for the preparation of traffic studies.[8]

6. EXISTING CONDITIONS

a. Existing Roadway System

The existing roadway network in the project study area is illustrated in **Figure 4.5-2, Existing Roadway System**, in the form of mid-block lanes. Existing intersection lane configurations are illustrated in **Figure 4.5-3, Existing Intersection Lane Configurations – County Intersections**, for locations under County jurisdiction and in **Figure 4.5-4, Existing Intersection Lane Configurations – City Intersections**, for locations under the jurisdiction of the City of Santa Clarita.

Regional access to the site in the north/south direction is provided via I-5, located approximately 1 mile to the east. Regional access to the site also is provided via SR-126, which is located to the north of the project

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6 County of Los Angeles Department of Public Works, *Traffic Impact Analysis Report Guidelines*, January 1997.

7 City of Santa Clarita, *Preliminary Traffic Impact Report Guidelines*, August 1990.

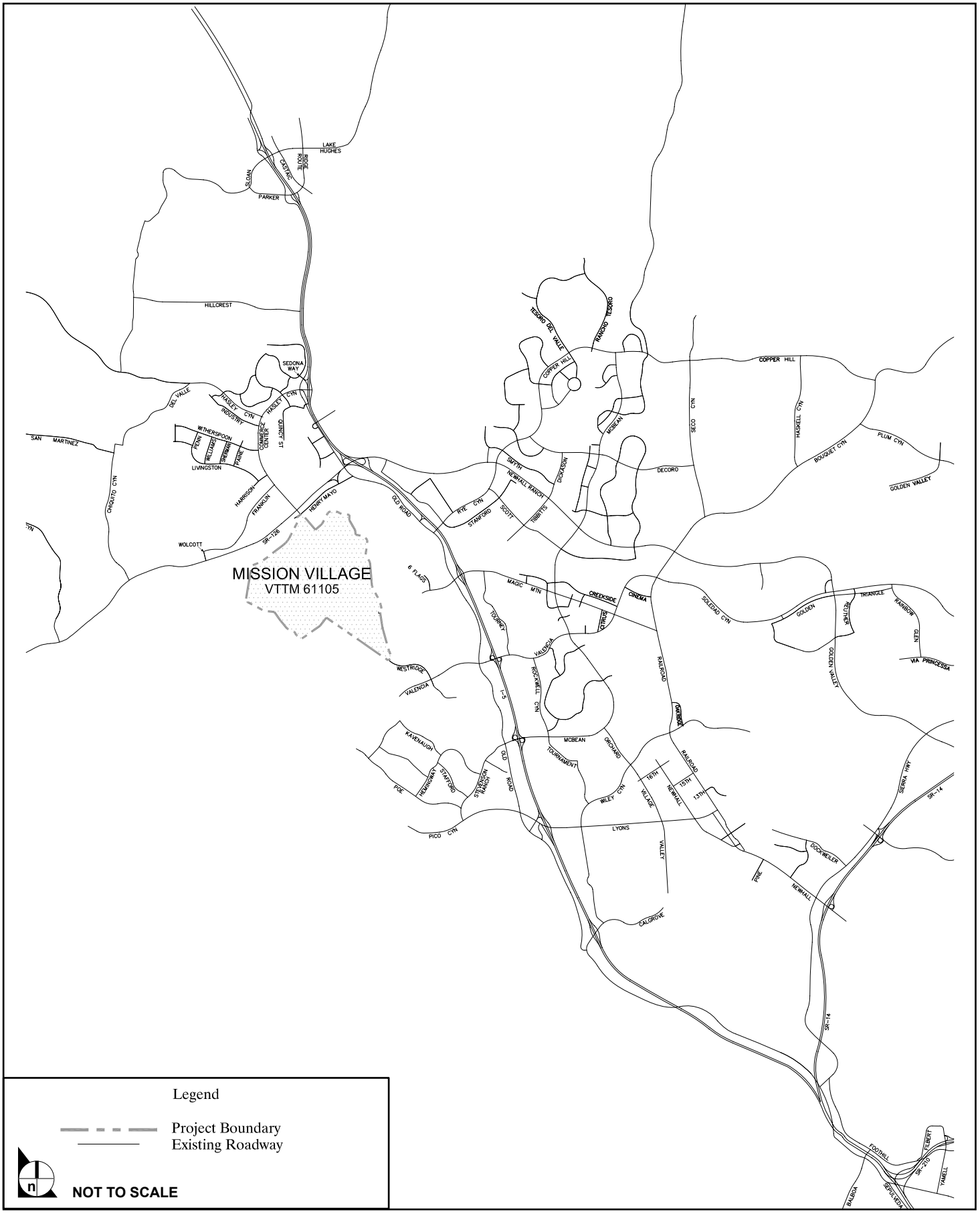
8 *Guide for the Preparation of Traffic Impact Studies*, Caltrans, December 2002.

site and runs in an east/west direction. Other primary roads in the area include Magic Mountain Parkway, which terminates just east of the project site in the vicinity of the entrance to Magic Mountain Theme Park, Commerce Center Drive, which terminates north of the project site at SR-126, and Westridge Parkway, which extends north from Valencia Boulevard, and presently terminates just to the southeast of the project boundary.

b. Existing Traffic Volumes and Levels of Service

Illustrations of peak hour turning movement volumes for each study area intersection can be found in **Figure 4.5-5, AM Peak Hour Turning Movement Volumes – Existing Conditions (County Intersections),** and **Figure 4.5-6, PM Peak Hour Turning Movement Volumes – Existing Conditions (County Intersections),** for County intersections. Illustrations of peak hour turning movement volumes for City area intersections can be found in **Figure 4.5-7, AM Peak Hour Turning Movement Volumes – Existing Conditions (City Intersections),** and **Figure 4.5-8, PM Peak Hour Turning Movement Volumes – Existing Conditions (City Intersections)**, for City. Traffic count data was collected during the critical AM and PM peak hours in late 2009 and early 2010 for each of the study area intersections. Printouts of the traffic count data sheets can be found in Appendix D of the Traffic Impact Analysis in **Appendix 4.5** of the EIR.

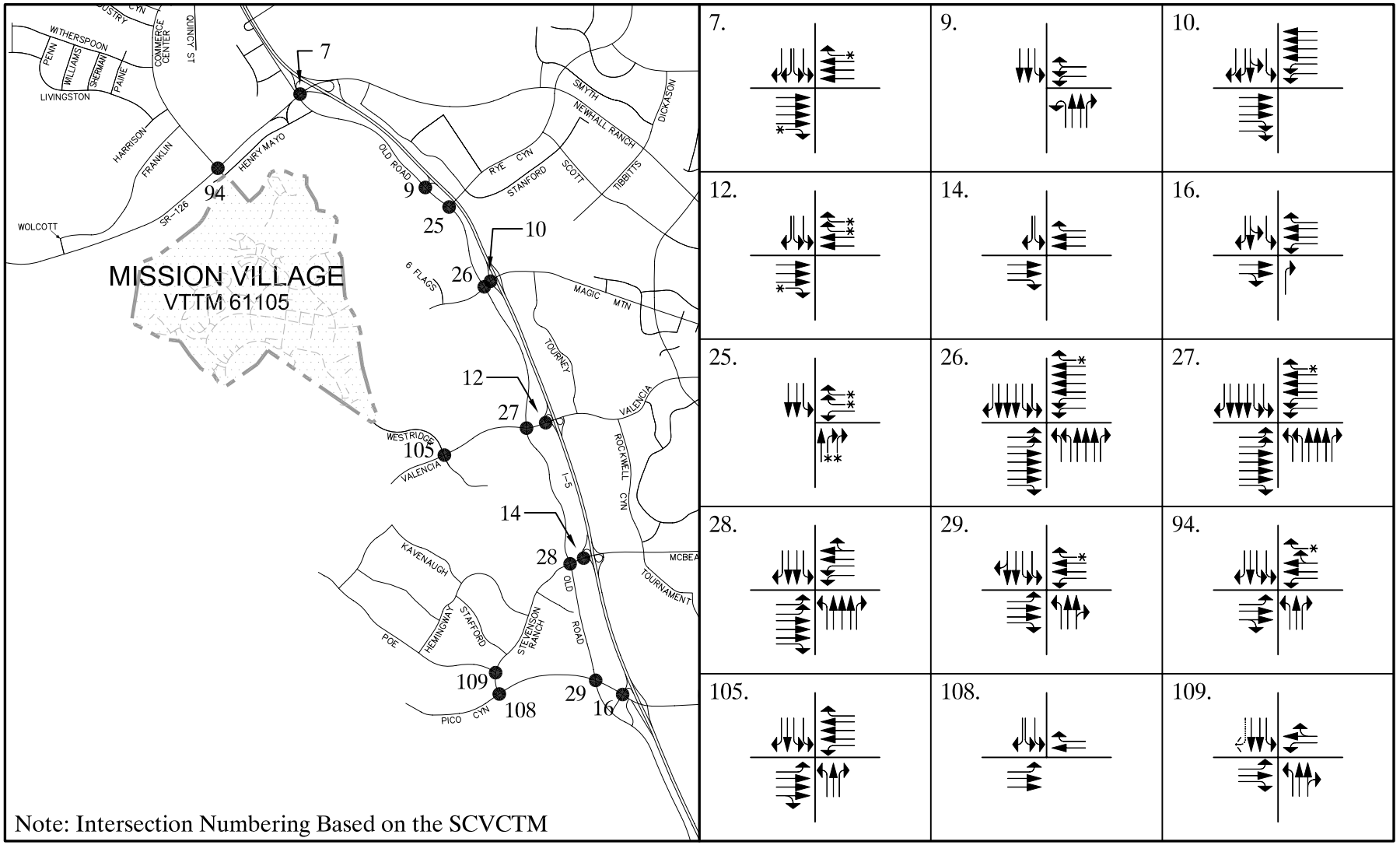
Intersection capacity utilization (ICU) and LOS analyses for the study area intersections are provided **in Table 4.5-4, ICU and LOS Summary – Existing Conditions**, which summarizes the existing ICU and LOS traffic count data for the County and City intersections and Caltrans interchanges. **Table 4.5-4** shows that all intersections in the study area currently operate at LOS D or better, with the exception of The Old Road and I-5 southbound ramps, which is currently deficient in the PM peak hour (LOS E) under County performance standards. No intersections currently operate at LOS F.



SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-2**

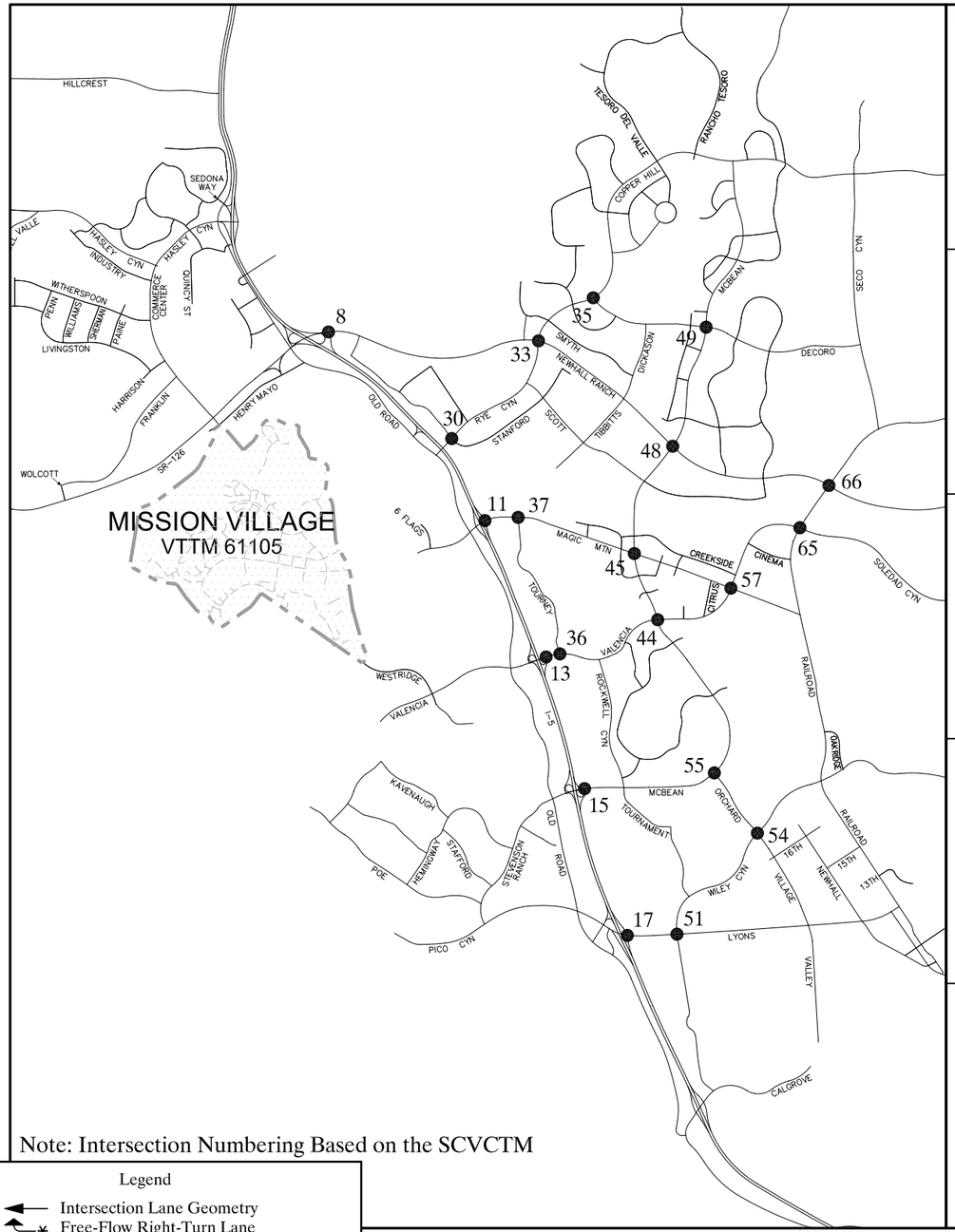
Existing Roadway System



SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-3**

Existing Intersection Lane Configurations – County Intersections



Note: Intersection Numbering Based on the SCVCTM

Legend

- Intersection Lane Geometry
- Free-Flow Right-Turn Lane
- De-Facto Right-Turn Lane

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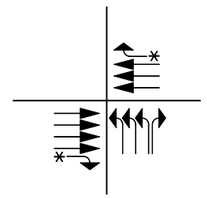

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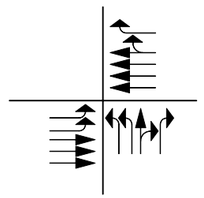

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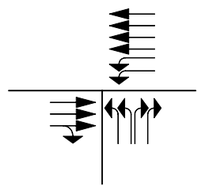

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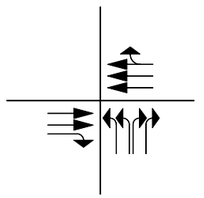

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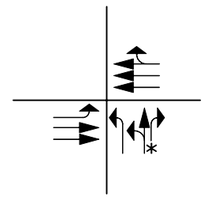

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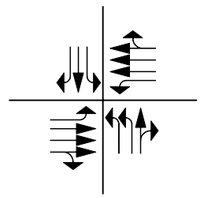

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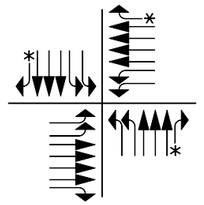

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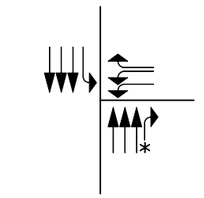

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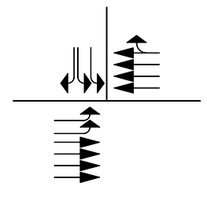

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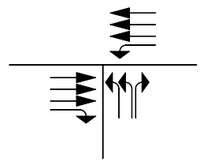

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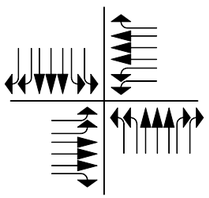

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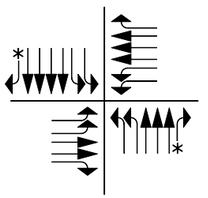

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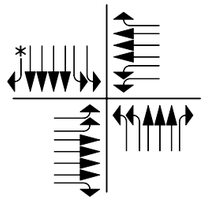

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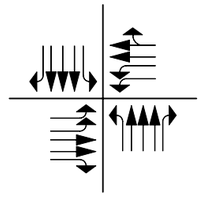

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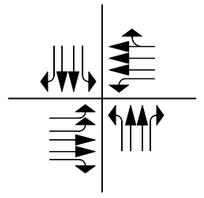

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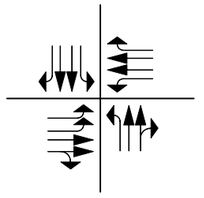

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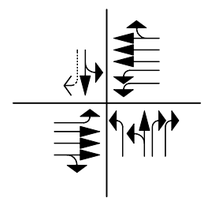

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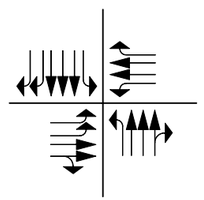

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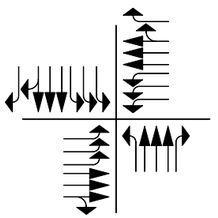

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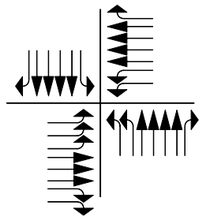
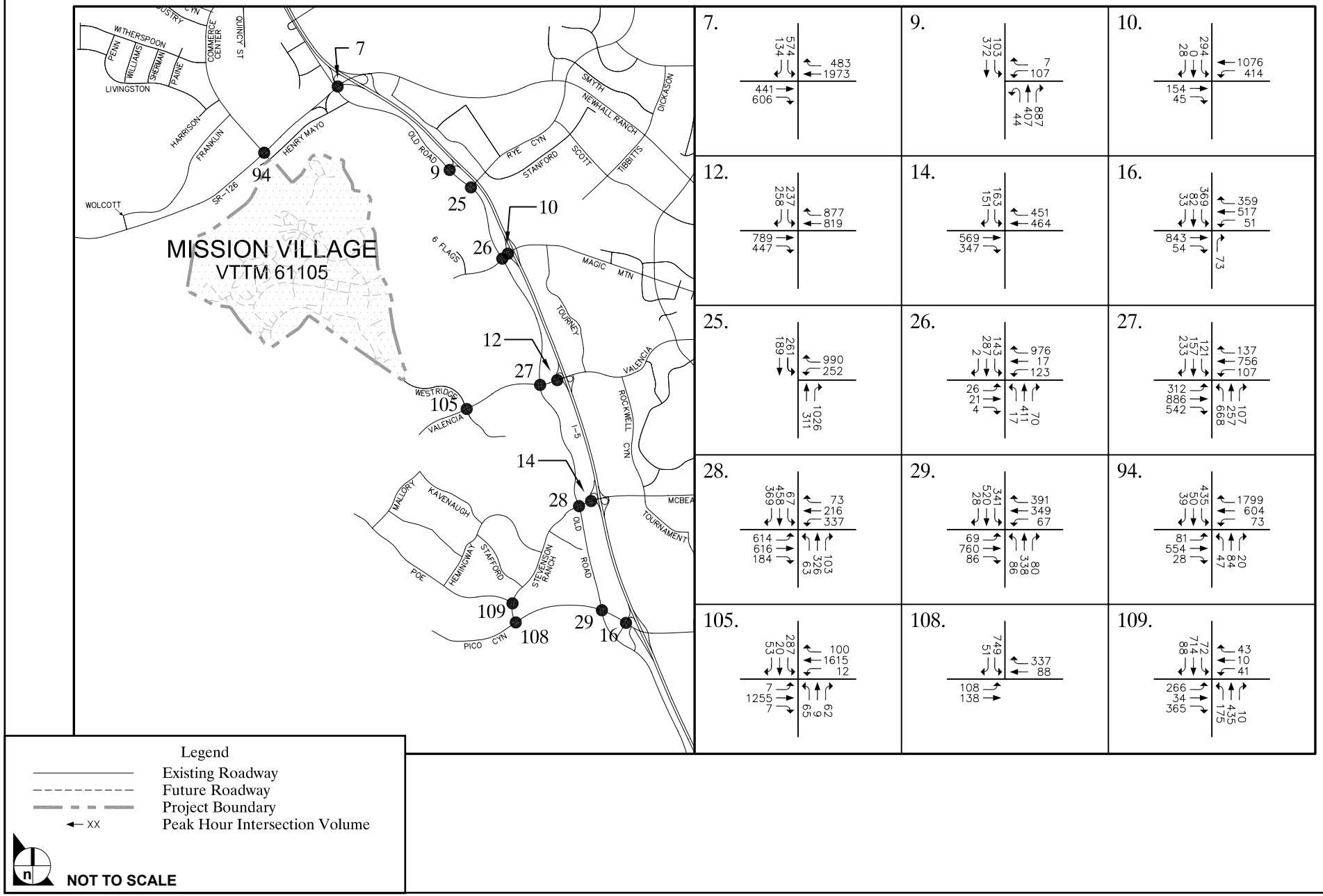


SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-4**

Existing Intersection Lane Configurations – City Intersections



Legend

Existing Roadway

Future Roadway

Project Boundary

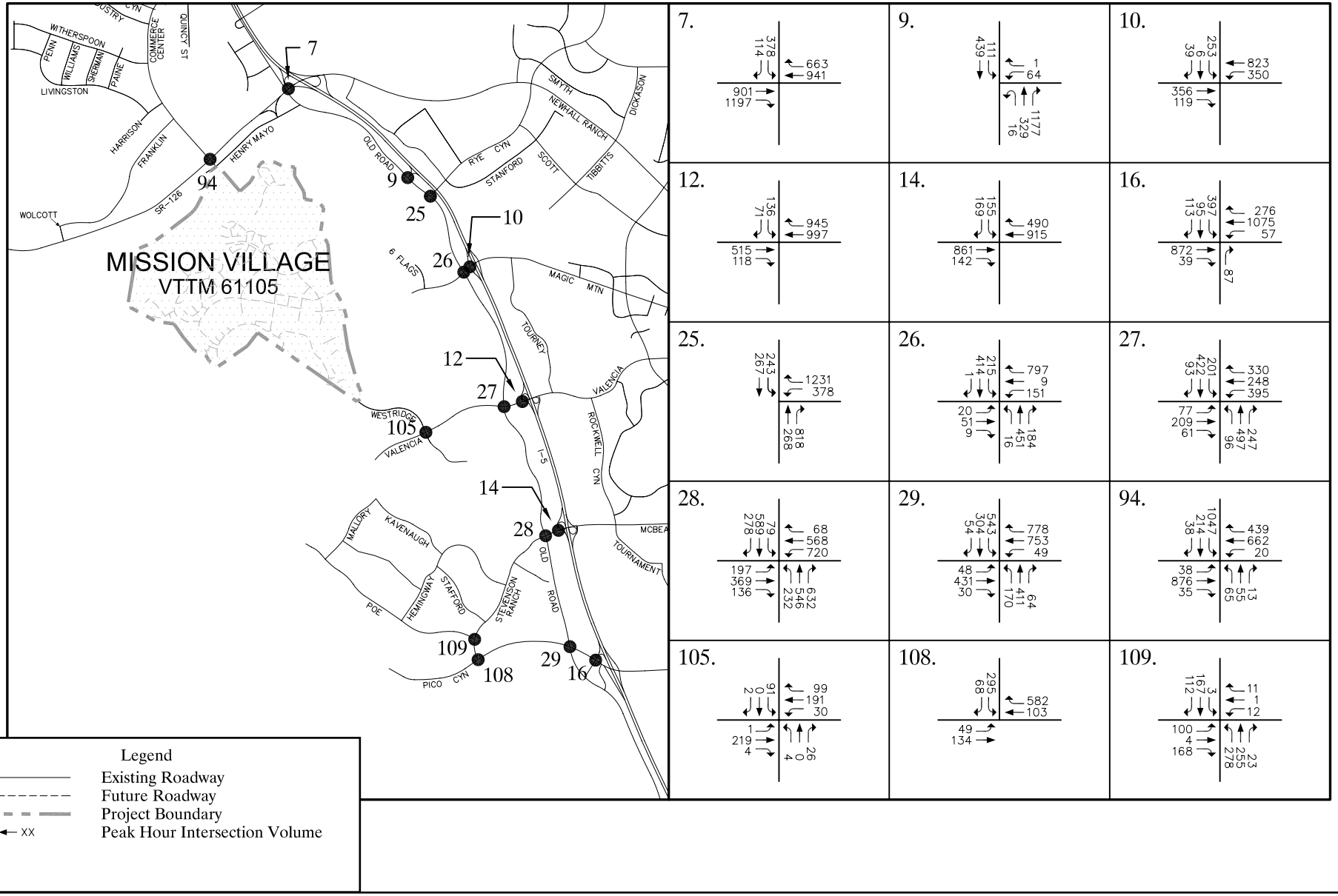
← XX Peak Hour Intersection Volume

NOT TO SCALE

SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-5**

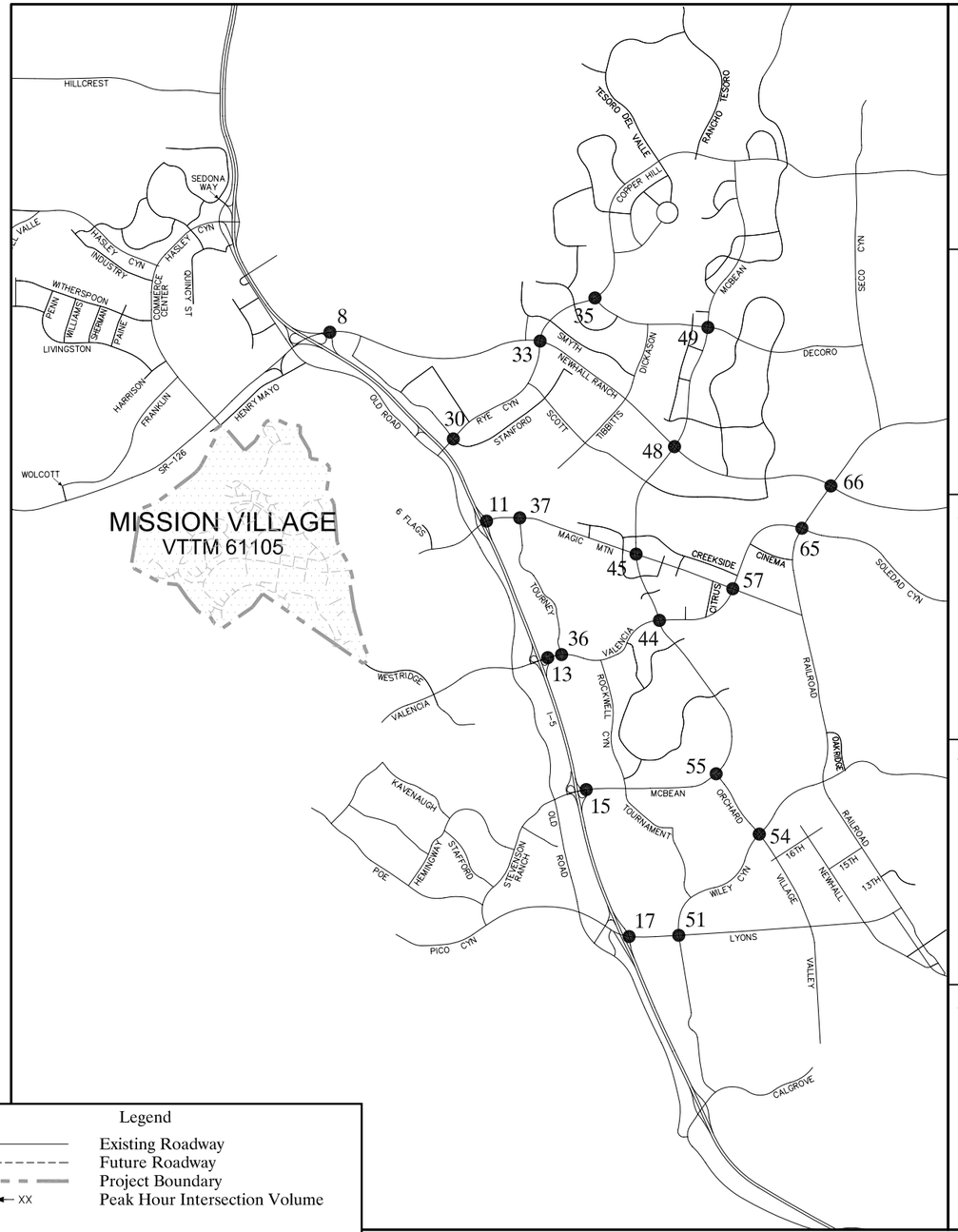
AM Peak Hour Turning Movement Volumes – Existing Conditions (County Intersections)



SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-6**

PM Peak Hour Turning Movement Volumes – Existing Conditions (County Intersections)



Legend

- Existing Roadway
- Future Roadway
- Project Boundary
- ← XX Peak Hour Intersection Volume

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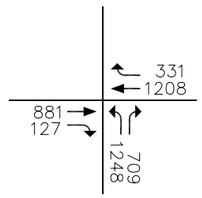

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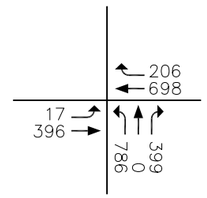

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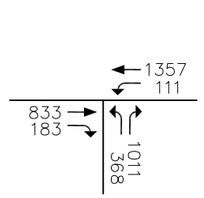

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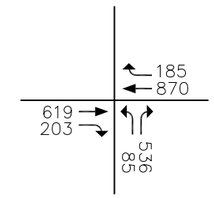

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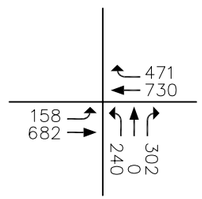

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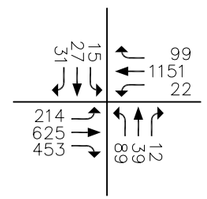

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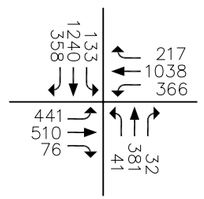

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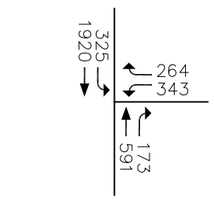

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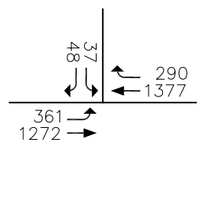

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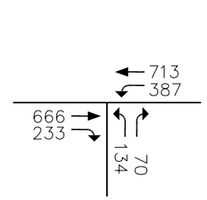

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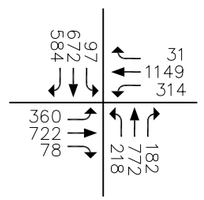

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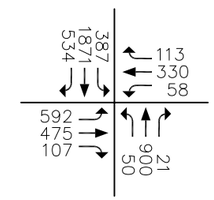

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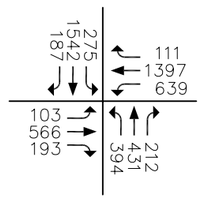

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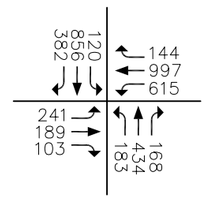

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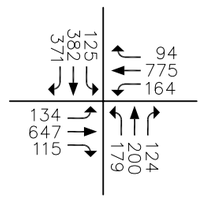

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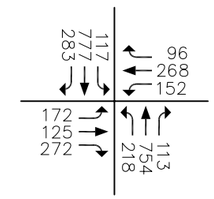

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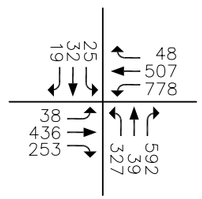

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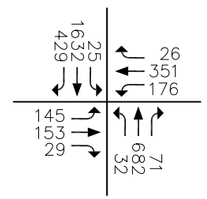

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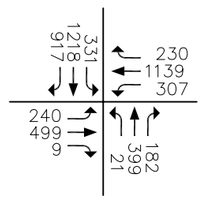

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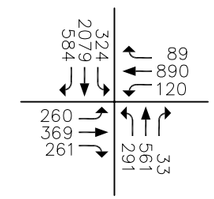
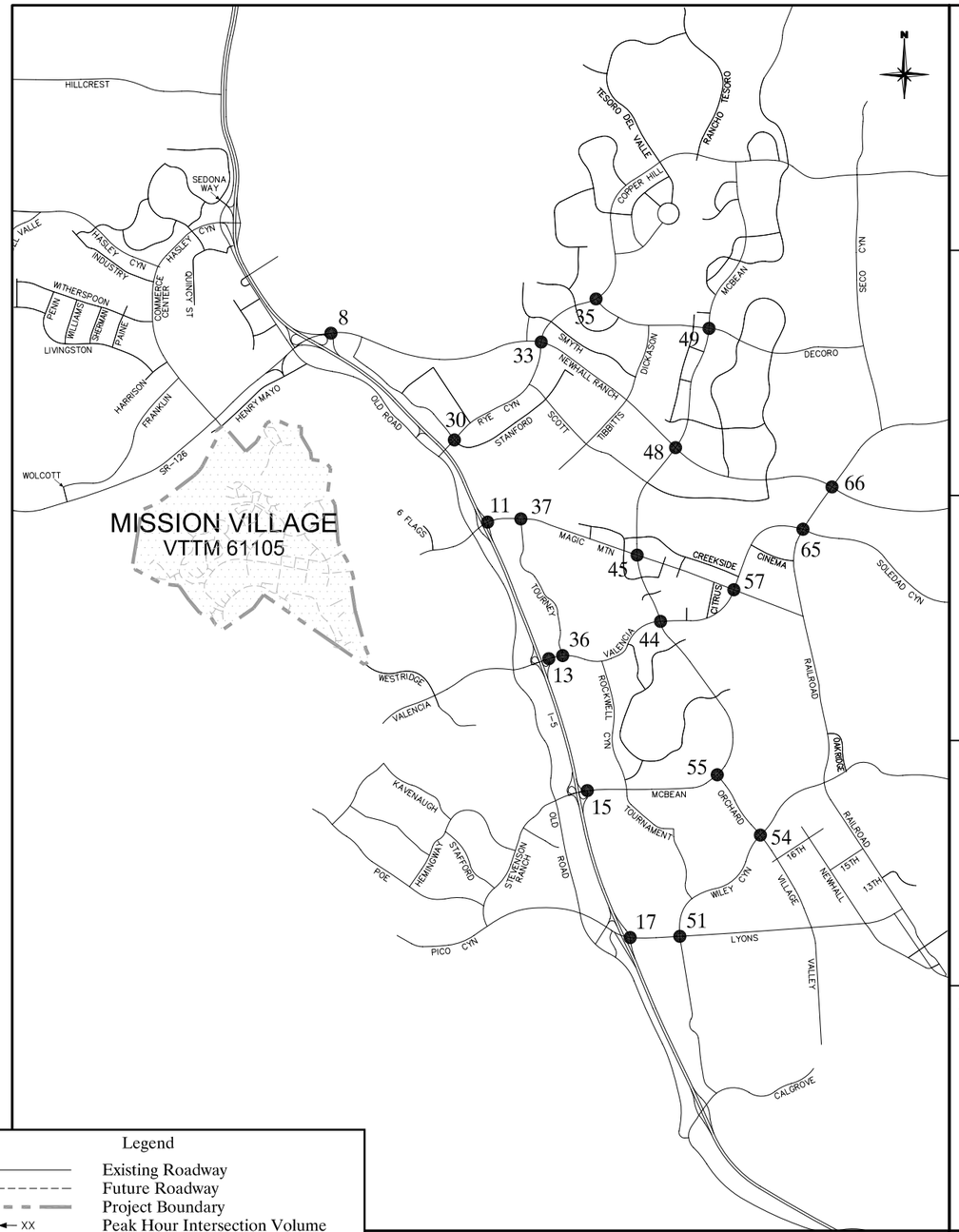


SOURCE: Austin Foust Associates, Inc. –August 2010

FIGURE **4.5-7**

AM Peak Hour Turning Movement Volumes – Existing Conditions (City Intersections)



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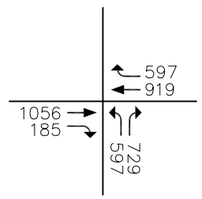

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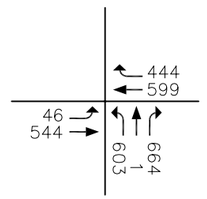

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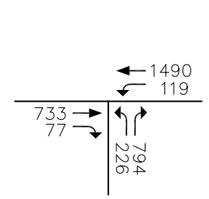

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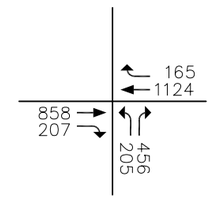

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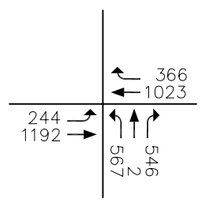

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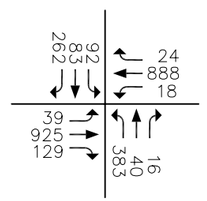

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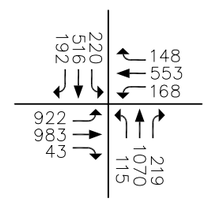

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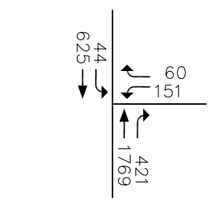

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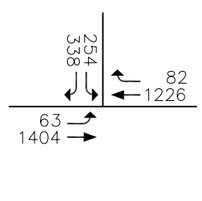

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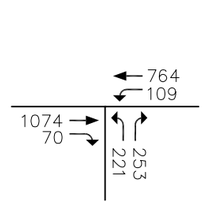

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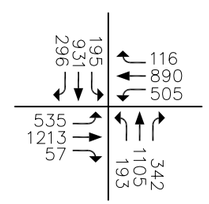

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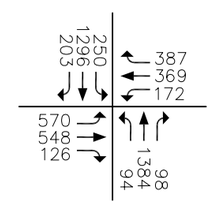

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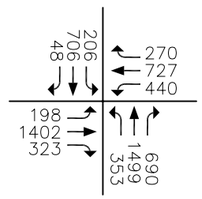

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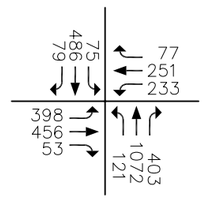

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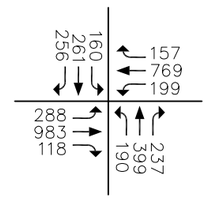

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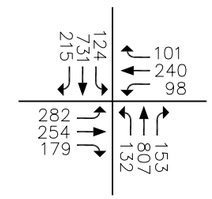

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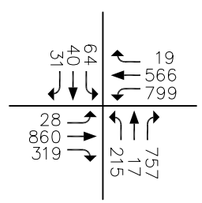

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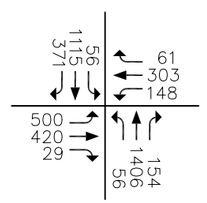

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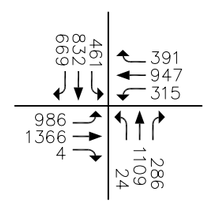

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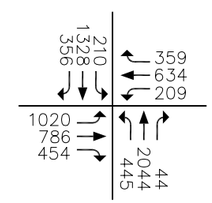

Legend

- Existing Roadway
- Future Roadway
- Project Boundary
- ← XX Peak Hour Intersection Volume

NOT TO SCALE

SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-8**

PM Peak Hour Turning Movement Volumes – Existing Conditions (City Intersections)

Table 4.5-4
ICU and LOS Summary – Existing Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
County Intersections				
25. The Old Rd/Rye Canyon Rd	0.61	B	0.66	B
26. The Old Rd/Magic Mtn Pkwy	0.28	A	0.32	A
27. The Old Rd/Valencia Blvd	0.67	B	0.44	A
28. The Old Road/McBean Parkway	0.58	A	0.76	C
29. The Old Road/Pico Canyon Rd	0.63	B	0.71	C
105. Westridge Parkway/Valencia Blvd	0.55	A	0.20	A
108. Stevenson Ranch Parkway/Pico Canyon Rd	0.49	A	0.51	A
109. Stevenson Ranch Parkway/Poe Parkway/Chase	0.63	B	0.39	A
City Intersections				
30. Ave Stanford/Rye Canyon Rd	0.51	A	0.54	A
33. Copper Hill Dr/Newhall Ranch Rd	0.63	B	0.70	B
35. Copper Hill Dr/Decoro Dr	0.57	A	0.51	A
36. Tourney Rd/Valencia Blvd	0.45	A	0.48	A
37. Tourney Rd/Magic Mtn Pkwy	0.49	A	0.45	A
44. McBean Pkwy/Valencia Blvd	0.61	B	0.74	C
45. McBean Pkwy/Magic Mtn Pkwy	0.61	B	0.76	C
48. McBean Pkwy/Newhall Ranch Rd	0.73	C	0.78	C
49. McBean Pkwy/Decoro Dr	0.77	C	0.54	A
51. Wiley Canyon Rd/Lyons Ave	0.60	B	0.69	B
54. Orchard Village Rd/Wiley Canyon Rd	0.60	A	0.62	B
55. Orchard Village Rd/McBean Pkwy	0.57	A	0.68	B
57. Valencia Blvd/Magic Mtn Pkwy	0.58	A	0.66	B
65. Bouquet Cyn Rd/Soledad Cyn Rd	0.68	B	0.77	C
66. Bouquet Cyn Rd/Newhall Ranch Rd	0.66	B	0.82	B
Caltrans/County Interchanges				
7. I-5 SB Ramps/SR-126	0.71	C	0.43	A
8. I-5 NB Ramps/SR-126	0.66	B	.68	B
9. The Old Rd/I-5 SB Ramps	0.72	C	0.91	E
10. I-5 SB Ramps/Magic Mtn Pkwy	0.36	A	0.37	A
11. I-5 NB Ramps/Magic Mtn Pkwy	0.42	A	0.42	A
12. I-5 SB Ramps/Valencia Blvd	0.52	A	0.46	A
13. I-5 NB Ramps/Valencia Blvd	0.59	A	0.49	A

Intersection	AM Peak Hour		PM Peak Hour	
	ICU	LOS	ICU	LOS
14. I-5 SB Ramps/McBean Parkway	0.38	A	0.50	A
15. I-5 NB Ramps/McBean Parkway	0.43	A	0.48	A
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Ave	0.58	A	0.59	A
17. I-5 NB On/Off & Lyons Ave	0.53	A	0.66	B
94. Commerce Center Dr/SR-126	0.54	A	0.78	C

*Source: Austin-Foust Associates, Inc., Mission Village Traffic Impact Analysis, October 2010 (**Appendix 4.5**).*
Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

With respect to the I-5 freeway, as noted above, the I-5 mainline is currently built to eight lanes, although Caltrans presently is implementing a project to expand the freeway to HOV and truck lanes. A summary of the existing traffic volumes on the I-5 freeway is provided in **Table 4.5-5, Freeway Volumes and V/C Ratios – Existing (2010) Conditions**, along with the resulting V/C calculations. These volumes were derived using data obtained from the Caltrans Performance Measurement System (PeMS) along with traffic counts collected at the ramps. As shown on **Table 4.5-5,** most of the freeway segments currently operate within the capacity of the freeway, with the exception of the following two mainline segments:

411. Southbound I-5 between Calgrove & SR-14 (V/C = 1.08/LOS F, AM; V/C = 1.02/LOS, PM)

412. Southbound I-5 south of SR-14 (V/C = 1.04/LOS F, AM).

c. Existing Transit Service

The project study area is served by two major transit carriers: the Santa Clarita Transit (SCT) system operated by the City of Santa Clarita and Metrolink operated by the Southern California Regional Rail Authority (SCRRA). The SCT largely serves the Santa Clarita Valley, while Metrolink currently serves Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties.

Santa Clarita Transit currently operates two fixed-route transit lines (Routes 3 and 7) in the project vicinity providing bus service to the Six Flags Magic Mountain Theme Park. Route 3 provides service between the Saugus community and Six Flags; and Route 7 provides service between the Tesoro Del Valle area and Six Flags. Major destinations for Route 3 are Seco Canyon, Civic Center, and The Old Road/Westridge Center. Major destinations for Route 7 are the Northpark and the Northbridge areas. Both routes serve the Tamarack loop, the Valencia Town Center area, Kaiser Medical Center/Borax, and Six Flags Magic Mountain Theme Park.[9] Also near to the project site are Routes 1 and 2, which serve the McBean Regional Transit Center, Industrial Center, Commerce Center, Newhall Metrolink, City Hall,

9 City of Santa Clarita. "Santa Clarita Transit." [Online] 26 April 2010. http://www.santa-clarita.com/cityhall/field/transit/routes&schedules.asp.

Valencia Town Center, River Oaks Shopping Center, Canyon High School, Sierra Vista Jr. High School, and Plum Canyon. Additional routes, accessible from these routes, provide service to the greater Santa Clarita Valley Area.

It is anticipated that, over time, the local bus service will expand as additional development occurs within the valley. Typically, bus route plans are evaluated on an annual basis, and routes are added and/or modified as appropriate and as funding permits; therefore, as Mission Village develops, service to the project area could be added as determined at the discretion of SCT. Meanwhile, the current transit arrangement is anticipated to continue to serve local residents of the area, connecting residential areas with employment and commercial centers. See **subsection 7.f.(2), Project Transit Impacts**, for additional information regarding future transit services.

SCT also operates commuter buses, which provide regional service to downtown Los Angeles, the San Fernando Valley and the Antelope Valley. Specifically, commuter bus service is provided to the following locations: McBean Regional Transfer Center – North Hollywood Station (Route 757), Chatsworth Metrolink/Amtrak Station – Warner Center (Route 791 and 796), UCLA/Westwood – Century City (Routes 792 and 797), Van Nuys – Sherman Oaks (Routes 793 and 798), Los Angeles Union Station/Gateway Transit Center (Route 794), Vincent Grade/Acton Metrolink Station and Lancaster Metrolink Station (Route 795), and downtown Los Angeles – Santa Clarita Metrolink (Route 799).

As to Metrolink, the Mission Village site is located west of the Santa Clarita Metrolink Rail Station on Soledad Canyon Road and the Jan Heidt Metrolink Station in Newhall. Metrolink provides commuter rail service between the Antelope Valley and Downtown Los Angeles, thereby supplying additional regional transit to the site. Metrolink also links Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties with convenient transfer service between the bus and rail systems. The Metro oversees transit planning in the Los Angeles County area. An eventual Metrolink extension along the SR-126 corridor to Ventura County is part of the long-range transit plans prepared by Ventura County, the City of Santa Clarita, and the Southern California Association of Governments, although no specific plans have been developed as of this time.

Table 4.5-5
Freeway Volumes and V/C Ratios – Existing (2010) Conditions

Segment		Lanes	Capacity	AM Peak Hour				PM Peak Hour			
				Northbound		Southbound		Northbound		Southbound	
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C
401.	North of Lake Hughes	4M	8,000	1,300	0.16	1,400	0.18	2,200	0.28	1,800	0.23
402.	Between Lake Hughes & Parker	4M	8,000	1,400	0.18	1,700	0.21	2,500	0.31	2,000	0.25
403.	Between Parker & Hasley Canyon	4M	8,000	1,700	0.21	2,200	0.28	3,100	0.39	2,400	0.30
404.	Between Hasley Canyon & SR-126	4M	8,000	2,300	0.29	3,100	0.39	4,100	0.51	3,000	0.38
405.	Between SR-126 & Rye Canyon	4M	8,000	3,200	0.40	3,500	0.44	4,400	0.55	4,200	0.53
406.	Between Rye Canyon & Magic Mtn	4M	8,000	3,200	0.40	4,400	0.55	4,400	0.55	5,400	0.68
407.	Between Magic Mtn & Valencia	4M	8,000	4,100	0.51	4,600	0.58	5,200	0.65	5,600	0.70
408.	Between Valencia & McBean	4M	8,000	5,200	0.65	5,600	0.70	6,000	0.75	6,400	0.80
409.	Between McBean & Pico/Lyons	4M	8,000	5,200	0.65	6,200	0.78	6,300	0.79	6,700	0.84
410.	Between Pico/Lyons & Calgrove	4M	8,000	5,100	0.64	6,700	0.84	6,800	0.85	6,500	0.81
411.	Between Calgrove & SR-14	4M (NB) 4M* (SB)	8,000 6,400	5,100	0.64	6,900	1.08	6,800	0.85	6,500	1.02
412.	South of SR-14	6M + 2T (NB) 5M + 2T (SB)	14,400 12,400	6,700	0.47	13,900	1.12	13,500	0.94	9,300	0.75

M = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
M = Mixed-Flow Lane on an Extended Uphill Grade, Without a Truck Lane (Capacity = 1,600 vehicles per hour)*
T = Truck Lane (Capacity = 1,200 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.

7. PROPOSED PROJECT IMPROVEMENTS

a. Site Access and Proposed Improvements

Under the proposed project, Magic Mountain Parkway would be extended westward from its current terminus just west of the entrance of Magic Mountain Theme Park. Concurrently, Westridge Parkway would be extended northerly where it would terminate at the Magic Mountain Parkway extension on the project site. Subsequent to these improvements, Commerce Center Drive would be extended southward through the site from SR-126 until it intersects with Magic Mountain Parkway. See **Figure 4.5-9, Roadway Classifications – On-Site**.

The proposed on-site circulation system comprises an inter-related set of local roadways that would serve the adjacent land uses and provide accessibility between those uses and the arterial system. These local roadways would be designed as two-lane streets with flaring at intersections where necessary. The on-site circulation system is shown on **Figure 4.5-9**.

The Mission Village project-level circulation system is consistent with, and implements, the mobility objectives of the Specific Plan's approved Master Circulation Plan. The Newhall Ranch Specific Plan designates the extension of Magic Mountain Parkway as a six-lane Major Highway for the segment east of Westridge Parkway and a four-lane Secondary Highway for the segment west of Westridge Parkway. The extension of Commerce Center Drive is currently designated as a six-lane Major Highway. The extension of Westridge Parkway within the project site has been planned as a four-lane collector roadway.

Figure 4.5-10, Intersection Lane Configurations – On-Site, illustrates the number of midblock lanes and the intersection geometry for all the major on-site intersections. In addition to the on-site roadway improvements that would be constructed as part of the project, the proposed project also includes a bus transfer station that would facilitate the use of transit for those who live or work at the project site.

8. PROJECT IMPACTS

The analysis of potential traffic/access impacts associated with operation of the proposed project, including the significance criteria applicable to assessing such impacts, is presented below.

a. Significance Threshold Criteria

Significance threshold criteria for traffic/access are specified in Appendix G of the *California Environmental Quality Act* (*CEQA) Guidelines*. Under these guidelines, a project would have a potentially significant impact on traffic/access if it would:

- conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but

not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;[10]
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);[11]
- result in inadequate emergency access; or[12]
- conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.[13]

With respect to the first criterion, circulation system performance criteria are based on two primary measures. The first is "capacity," which establishes the vehicle carrying ability of a roadway, and the second is "volume." The volume measure is either a traffic count (in the case of existing volumes) or a forecast for a future point in time. The ratio between the volume and the capacity gives a V/C ratio and based on that V/C ratio, a corresponding LOS is defined.

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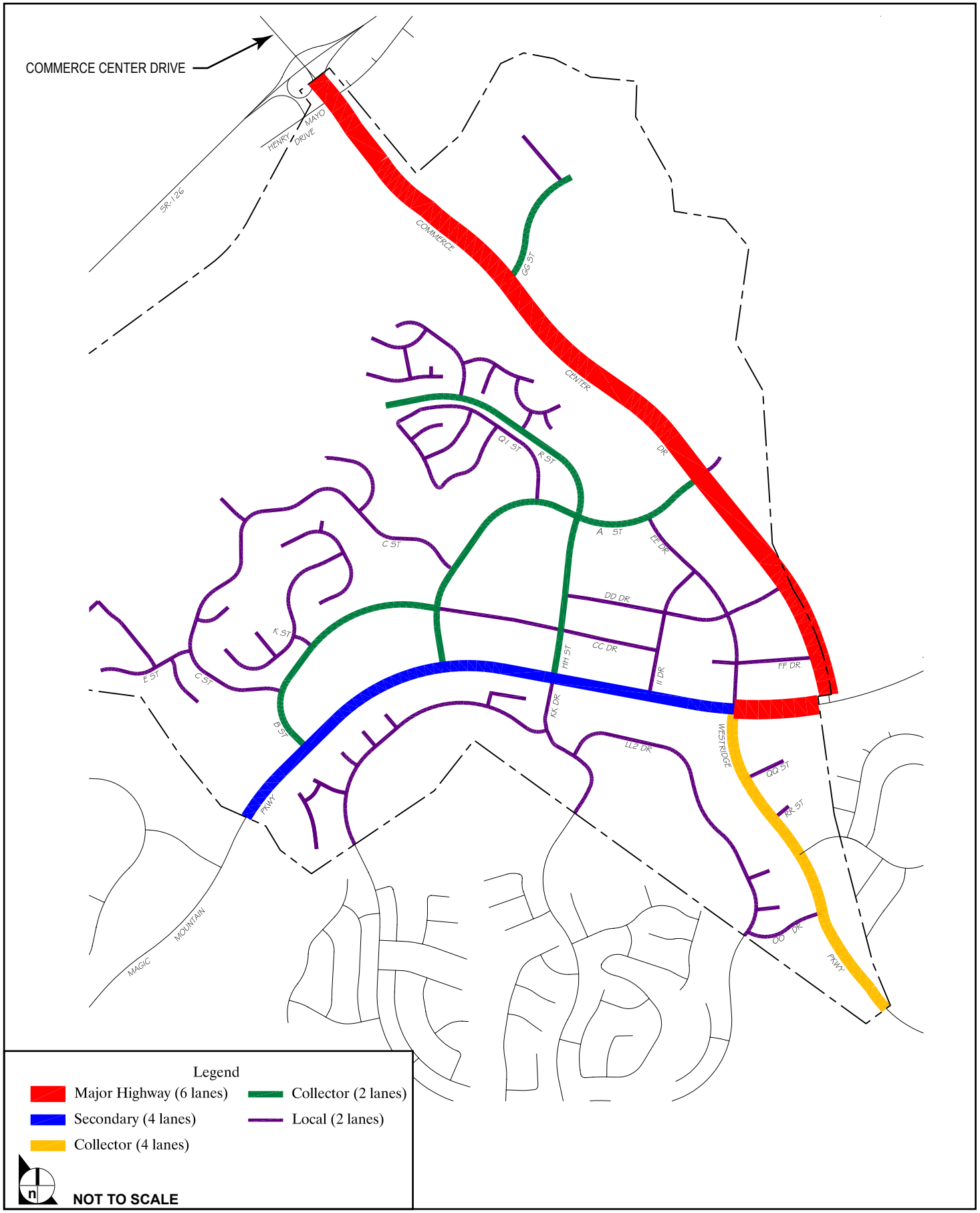
10 The proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Additionally, the *Mission Village Initial Study* determined that the proposed project would not result in potential impacts relating to safety hazards associated with airport uses. (See *Mission Village Initial Study*, Appendix ES, p. 22.) Therefore, no impact to air traffic patterns would occur as a result of the proposed project and no further analysis is necessary.

11 The on-site circulation system to be built as part of the proposed project will provide vehicular access onto and within the project site that complies with all applicable County codes and regulations, as well as the *Newhall Ranch Specific Plan*. Therefore, the proposed project will not substantially increase hazards due to a design feature or incompatible uses, and no further analysis is necessary. (See also *Mission Village Initial Study*, Appendix ES, p. 16.) With respect to parking, the proposed project would provide parking consistent with the parking regulations set forth in *Newhall Ranch Specific Plan*, Section 3.7. Therefore, the project would provide adequate parking for the uses proposed under the Mission Village tract map and no further analysis of parking capacity is necessary.

12 The *Mission Village Initial Study* determined that the proposed project would not result in potential impacts relating to inadequate emergency access. (See, *Mission Village Initial Study*, Appendix ES, p. 16.) Therefore, no further analysis is necessary. For related information, see EIR **Section 4.11, Sheriff Services**, and **Section 4.12, Fire Protection Services**.

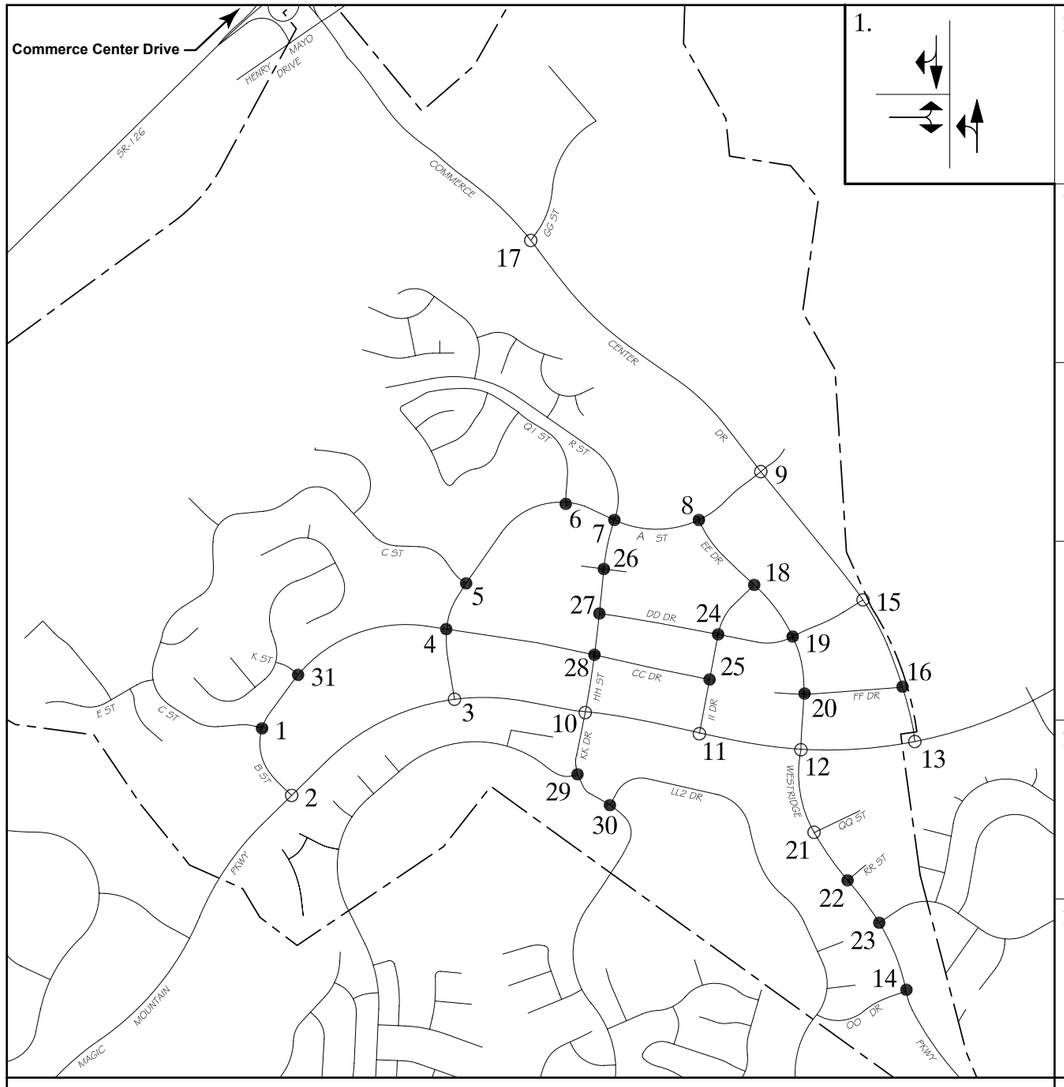
13 In addition to the analysis provided in this section, EIR, **Section 2.0**, **Environmental and Regulatory Setting**, analyzes the proposed project's consistency with SCAG's Regional Transportation Plan, and Compass Growth Vision Report. The project is considered consistent with these adopted plans and programs.



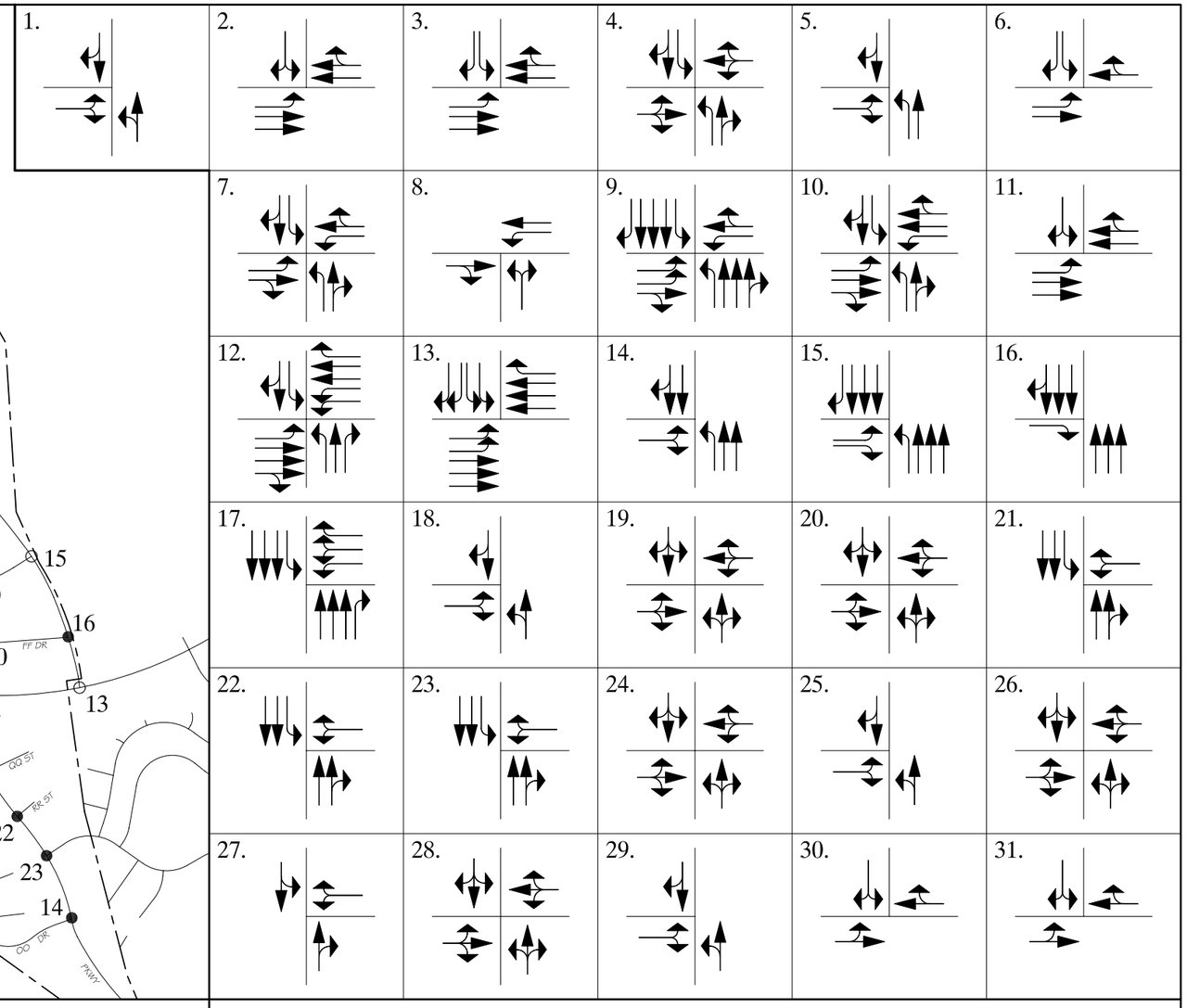
SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-9**

Roadway Classifications – On-Site



INTERSECTION LOCATIONS



INTERSECTION LANES

Legend
- Intersection Location (Stop Sign Control)
- Intersection Location (Signal Control)
- Project Boundary
- Intersection Lane

NOT TO SCALE

SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-10**

Intersection Lane Configurations – On-Site

Table 4.5-6, Volume/Capacity Ratio Level of Service Ranges, summarizes the V/C ranges that correspond to LOS "A" through "F" for arterial roads, intersections, and freeway segments. The V/C ranges listed for arterial roads and intersections within the study area are those used by the County of Los Angeles and the City of Santa Clarita. The V/C ranges listed for freeway segments are based on the V/C and LOS relationships specified in the *2000 Highway Capacity Manual* for basic freeway sections with free-flow speeds of 105 kilometers per hour (65 miles per hour); the V/C methodology is specified by the County's CMP for the evaluation of CMP freeway monitoring stations.

Both the V/C ratio and the LOS are used in determining impact significance. Certain LOS values are deemed unacceptable by the County and City, and increases in the V/C ratio that cause or contribute to the LOS being unacceptable are defined as a significant impact (see following sections for details). With respect to state highways, the Caltrans *Guide for the Preparation of Traffic Impact Studies* does not identify a specific impact criteria due to differences between rural and urban areas of the State, as well as differences between the northern, central, and southern regions. Accordingly, the local Caltrans districts determine the impact criteria based on the appropriate requirements of that district. In this case, while Caltrans District 7 generally does not consider Los Angeles County's CMP criteria alone to be adequate for the analysis of transportation impacts pursuant to CEQA review, in light of the supplemental freeway analysis conducted as part of the EIR and the various mitigation measures built into the proposed project, Caltrans District 7 has determined that ~~while the Caltrans guidelines for the preparation of traffic studies recommends the HCM method for the evaluation of state highway facilities, those guidelines do not include a threshold of significance criteria for the determination of a significant project impact based on the HCM methodologies. As such,~~ the thresholds of significance criteria specified by the local agencies (i.e., County of Los Angeles, City of Santa Clarita, and the LA County CMP) are acceptable and, therefore, the County's CMP impact criteria are utilized for this analysis.

Table 4.5-6
Volume/Capacity Ratio Level of Service Ranges

V/C Ratio Range	LOS
Arterial Roads/Intersections	
0.00–0.60	A
0.61–0.70	B
0.71–0.80	C
0.81–0.90	D
0.91–1.00	E
Above 1.00	F

V/C Ratio Range	LOS
Freeway Segments (FFS = 65 mph)	
0.00–0.30	A
0.31–0.50	B
0.51–0.71	C
0.72–0.89	D
0.90–1.00	E
Above 1.00	F

*Source: Austin-Foust Associates, Inc., Mission Village Traffic Impact Analysis, October 2010 (**Appendix 4.5**).*

In establishing V/C based performance criteria, there are certain items that need to be addressed to obtain suitable V/C estimates and relate them to LOS. For instance, while average daily traffic is a useful measure to show general levels of traffic on a facility and to provide data for other related aspects such as noise and air quality, highway congestion is largely a peak hour or peak period occurrence and ADT does not reflect peak period conditions very effectively. For this reason, the analysis presented here focuses on those parts of the day when such congestion can occur, specifically the AM and PM peak hours. For the arterial and freeway system, the peak hour is the accepted period used for impact evaluation and a number of techniques are available to establish suitable V/C ratios and define the corresponding LOS. These definitions and procedures are established by individual local jurisdictions, such as the County, the City of Santa Clarita, or by regional programs such as the Congestion Management Program.

The analysis of the arterial road system is based on intersection capacity since this is the defining capacity limitation on an arterial highway system. There may be exceptions where certain facilities have long distances between signalized intersections, but within the traffic analysis study area in this case, peak hour intersection performance is the most representative measure for evaluating the arterial road system.

As to the freeway system, the analysis of the freeway system is based on peak hour volumes by direction. The measure used to provide an estimate of LOS can be V/C, speed (miles per hour) or density (passenger cars/mile/lane). The three basic measurements for traffic (speed, density, and volume) are interrelated in such a way that if values for two of these measures are known, the third can be computed. **Table 4.5-7, LOS Criteria for Basic Freeway Segments**, shows the relationship between these three measures and how they translate to LOS.

Table 4.5-7
LOS Criteria for Basic Freeway Segments

Criteria	LOS				
	A	B	C	D	E
Maximum density (pc/mi/ln)	11	18	26	35	45
Minimum speed (mi/h)	65.0	65.0	64.6	59.7	52.2
Maximum V/C	0.30	0.50	0.71	0.89	1.00
Maximum service flow rate (pc/h/ln)	710	1,170	1,680	2,090	2,350

Notes:
The exact mathematical relationship between density and V/C has not always been maintained at LOS boundaries because of the use of rounded values. Density is the primary determinant of LOS. The speed criterion is the speed at maximum density for a given LOS. Values based on a free flow speed of 65 mph.
*Source: Highway Capacity Manual 2000 (HCM 2000) (**Appendix 4.5**, AFA Traffic Impacts Analysis, October 2010).*

Levels of service for arterial roadway intersections and for freeway mainline segments are determined based on operating conditions during the AM and PM peak hours. For intersections, the intersection capacity utilization (ICU) methodology is applied, providing a planning level basis for determining V/C and LOS. This methodology sums the V/C ratios for the critical movements of an intersection and is the preferred procedure for intersection analysis by the City of Santa Clarita and the County of Los Angeles. The ICU methodology is generally compatible with the intersection capacity analysis methodology outlined in the *HCM 2000*. For freeway segments, the V/C methodology is applied, which also provides a planning level basis for determining capacity utilization and LOS, and which is the methodology specified by the County CMP. The HCM 2000 equates V/C ratios to other performance measures such as speed and density as shown in **Table 4.5-7**.

The following outlines the impact criteria for the facilities within the project study area.

(1) Arterial Intersections

The ICU calculation methodology and associated impact criteria for the project study area arterial system are summarized in **Table 4.5-8, Arterial Intersection Performance Criteria**. The County strives to maintain LOS C (ICU not to exceed 0.80) at existing intersections, and utilizes LOS D (ICU not to exceed 0.90) as the accepted standard and target LOS for the design of future intersections, as well as for existing intersections for long-range planning purposes. The City of Santa Clarita strives to maintain LOS D for existing and future conditions. However, several intersections in both the city and county have been identified as operating at LOS E for General Plan Buildout Conditions as part of the pending General Plan/Area Plan update.

Table 4.5-8
Arterial Intersection Performance Criteria

V/C Calculation Methodology	
Level of service to be based on peak hour intersection capacity utilization (ICU) values calculated using the following assumptions:	
Saturation Flow Rates	
County Methodology:	1,600 vehicles/hour/lane for through lanes, right-turn lanes and single left-turn lanes
	2,880 vehicles/hour for dual left-turn lanes
City Methodology:	1,750 vehicles/hour/lane for all lanes
Clearance Interval:	.10
Performance Targets	
County:	LOS D (peak hour ICU less than or equal to 0.90) for long-range cumulative buildout conditions
	Mid-LOS C (peak hour ICU less than 0.75) or existing LOS, whichever is greater, for existing intersections for short-range conditions
City:	LOS D or existing LOS, whichever is greater, or LOS E as identified in the General Plan for select intersections

Impact Thresholds	
An intersection is considered to be significantly impacted if compared to the ICU in the no-project alternative, the ICU in the with-project alternative increases the ICU by the following:	
County Thresholds: Pre-Project ICU	Project Increment
0.71–0.80 (LOS C)	greater than or equal to 0.04
0.81–0.90 (LOS D)	greater than or equal to 0.02
0.91 or more (LOS E & F)	greater than or equal to 0.01
City Thresholds: With-Project ICU	Project Increment
0.81–0.90 (LOS D)	greater than or equal to 0.02
0.91 or more (LOS E&F)	greater than or equal to 0.01

*Source: Austin-Foust Associates, Inc., Mission Village Traffic Impact Analysis, October 2010 (**Appendix 4.5**).*
Abbreviations: ICU – Intersection Capacity Utilization; V/C – Volume/Capacity Ratio
Note: The County guidelines do not address situations where pre-project conditions are less than 0.71. In that situation, County staff has interpreted the guidelines to mean that an increase that results in a with-project condition of 0.75 or more is considered significant. The interpretation is based on the following scenario, which is addressed by the guidelines: 0.71 (pre-project) + 0.04 (project increment) = 0.75 and is a significant impact.

(2) Freeway Mainline Facilities

The freeway V/C calculation methodology and associated impact criteria for the study area freeway system are summarized below in **Table 4.5-9, Freeway Mainline Performance Criteria**. The County CMP specifies that LOS E or existing LOS, whichever is worse, represents the performance standard for freeway segments, and Caltrans goal is to maintain no worse than LOS E conditions in urban areas.

Table 4.5-9
Freeway Mainline Performance Criteria

V/C Calculation Methodology	
Level of service to be based on peak hour V/C values calculated using the following assumptions:	
Saturation/Service Flow Rates:	
Mainline Mixed-flow/General Purpose Lane:	2,~~2~~000 vehicles/hour/lane
Mainline Mixed-flow/General Purpose Lane on an Extended Uphill Grade:	1,600 vehicles/hour/lane
High Occupancy Vehicle (HOV) Lane:	1,600~~2,200~~ vehicles/hour/lane[1]
Auxiliary Lane:	1,000 vehicles/hour/lane
Truck Lane:	1,200 vehicles/hour/lane
Saturation flow rates derived from Caltrans PeMS data and through discussions with Caltrans staff.	
Performance Standard	
LOS E or existing LOS, whichever is worse (applicable to Urban areas)	
Impact Threshold	
A freeway mainline segment is considered to be adversely impacted if each of the following conditions are met:	
The segment is forecast to operate deficiently (i.e., worse than the performance standard).	
Compared to the V/C in the no-project alternative, the V/C in the with-project alternative increases by greater than or equal to 0.02 (the impact threshold specified in the CMP).	

[1] *Two separate analyses were conducted, one utilizing 2000 vehicles/hour/lane for HOV lanes and the other utilizing 1600 vehicles/hour/lane for HOV lanes.*

Abbreviations:
V/C – Volume/Capacity Ratio
PeMS – Performance Monitoring System
LOS – Level of Service
CMP – Congestion Management Program
*Source: Austin-Foust Associates, Inc. Traffic Impacts Analysis (October 2010) (see **Appendix 4.5**)*

(3) Congestion Management Program

As noted above, the CMP defines a significant impact as occurring when the proposed project increases traffic demand on a CMP facility by 2 percent or more of capacity (V/C ≥ 0.02), causing or worsening LOS F (V/C > 1.00).

The Los Angeles County Congestion Management Program requires that a proposed development address two major subject areas with respect to traffic impacts. These are the project's impacts on the CMP highway system and the project's impacts on the local and regional transit systems.

With respect to CMP highway system impacts, according to the CMP guidelines, the geographical area examined in a CMP traffic impact analysis consists of the CMP monitoring locations that meet the following criteria:

1. CMP intersections where the proposed project will add 50 or more trips during the AM or PM weekday peak hours (of adjacent street traffic).

2. Mainline freeway locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

b. Construction-Related Impacts

Construction of the proposed project and recommended improvements could result in temporary disruptions of normal traffic patterns on roadways or intersections in the immediate vicinity of the active construction zone. The disruption of normal traffic flow would be limited in both duration and extent, with most disruption occurring during earlier phases of construction when earthwork and utility construction is taking place. Potential traffic disruption and conflicts between construction activities and through traffic will be controlled in accordance with the Caltrans Manual of Traffic Controls. These controls are expected to adequately reduce any potentially significant impacts resulting from disruptions of traffic and access during the construction period to a level below significant. Specific measures described in the Traffic Manual that are typically used at a construction site are summarized below:

- All traffic control measures, construction signs, delineators, etc., and their use during the construction phase of this project shall conform to the provisions set forth in the State of California, Department of Transportation, Manual of Traffic Controls, January 1992.

- In areas where traffic control necessitates, the contractor shall provide, post, and maintain "No Parking" and "No Stopping" signs, as directed by the Director of Public Works.

- The location of all signs shall be determined in the field by the County Engineer in conjunction with the contractor.

- No travel lane shall be less than 10 feet wide.

- Delineators shall be spaced at 50 feet maximum, or as noted on the final Traffic Control Plan.

- All traffic signal facilities shall be protected during construction or relocation.

- "Construction Ahead" and appurtenant signs are to be placed 1,000 feet in advance of all approaches to the project area, for the duration of construction.

- Private driveway closures shall be limited to the times of the day that construction is in progress.

- Cross street closures shall be limited to the times of the day that construction is in process.

With respect to the additional traffic that would be added to the study area roadway system as a result of construction-related vehicle trips, because the level of construction activities will vary throughout the

duration of the project and, therefore, the level of average daily vehicle trips will vary, average daily worker trips were estimated for each category of vehicle trip for each year of the period of project construction. Based on those estimates, the peak year for construction activity was determined to be in the 13th quarter of construction, when approximately 640 ADT due to construction activity would be generated. (See EIR **Appendix 4.5**, Traffic Impacts Analysis, Appendix H.)

The construction trips will be dispersed throughout the project site, with trips to and from the site occurring primarily on Magic Mountain Parkway and Commerce Center Drive. By the peak year of construction activity, the project will have constructed the Magic Mountain Parkway extension (which will be 4 to 10 lanes in size, with 6 lanes at the easterly project limits), and the Westridge Parkway extension (which will be 4 lanes). These two roadways collectively would provide capacity for approximately 90,000 ADT, of which construction-related traffic would utilize less than 1 percent of the available capacity. Therefore, based on the dispersed trip distribution, in combination with the fact that the construction activities would generate a relatively negligible amount of traffic on any given roadway, the increase in traffic due to construction activities would not result in a significant impact.

c. Project Trip Generation

Trip generation estimates for the proposed project are shown in **Table 4.5-10, Mission Village Land Use and Trip Generation Summary**. The trip generation estimates were calculated utilizing ITE trip generation rates and rates derived from the SCVCTM, as shown in the table. As depicted in **Table 4.5-10**, the proposed project is estimated to generate approximately 58,452 ADT at project buildout, with approximately 5,065 tripends occurring in the AM peak hour and approximately 5,926 tripends occurring in the PM peak hour.

d. Project Trip Distribution

(1) Internal Trips

As shown in **Table 4.5-10,** at buildout the proposed project would result in approximately 58,500 gross ADT, with approximately 5,100 gross trips during the AM peak hour (2,700 inbound), and approximately 5,900 gross trips during the PM peak hour (3,200 outbound), based on standard SCVCTM and ITE rates. However, due to the complementary mix of uses planned for the site, many of the trips generated by the project will remain internal to the project site. To determine the amount of trips that would be internal to the project site, as noted above, a mixed-use development (MXD) trip generation estimate has been prepared for the project.[14]

[14] As noted above, the quantitative model was developed by Fehr & Peers in cooperation with the U.S. Environmental Protection Agency and ITE.

Table 4.5-10
Mission Village Land Use and Trip Generation Summary

		AM Peak Hour			PM Peak Hour			
Land Use Type	**Units**	**IB**	**OB**	**Total**	**IB**	**OB**	**Total**	**ADT**
3. Single Family (6–10 du/ac)	382 du	73	213	286	244	143	387	3,783
4. Condominium/Townhouse	2,315 du	234	1,110	1,344	1,086	604	1,690	18,520
5. Apartment	905 du	73	388	461	370	190	560	6,244
7. Senior (Active)	459 du	37	54	91	73	45	118	1,702
8. CCRC	351 du	42	21	63	49	53	102	986
Residential Total	*4,412 du*	*459*	*1,786*	*2,245*	*1,822*	*1,035*	*2,857*	*31,235*
13. Commercial Shops	224.1 tsf	162	107	269	404	404	808	8,306
20. Elementary/Middle School	900 STU	234	180	414	72	81	153	1,305
24. Library	36 tsf	27	11	38	122	133	255	3,059
31. Business Park	697 tsf	836	160	996	210	690	900	7,110
40. Commercial Office	634 tsf	983	120	1,103	132	819	951	7,329
51. Developed Park[1]	40.9 AC	0	0	0	1	1	2	108
Non-Residential Total		*2,242*	*578*	*2,820*	*941*	*2,128*	*3,069*	*27,217*
TOTAL		2,701	2,364	5,065	2,763	3,163	5,926	58,452
Trip Rates								
3. Single Family (6–10 du/ac)[2]	du	0.19	0.56	0.75	0.64	0.37	1.01	9.90
4. Condominium/Townhouse[2]	du	0.10	0.48	0.58	0.47	0.26	0.73	8.00
5. Apartment[2]	du	0.08	0.43	0.51	0.41	0.21	0.62	6.90
7. Senior (Active)[2]	du	0.08	0.12	0.20	0.16	0.10	0.26	3.71
8. CCRC[3]	du	0.12	0.06	0.18	0.14	0.15	0.29	2.81
13. Commercial Shops[2]	tsf	0.72	0.48	1.20	1.80	1.80	3.60	37.06
20. Elementary/Middle School[2]	STU	0.26	0.20	0.46	0.08	0.09	0.17	1.45
24. Library[2]	tsf	0.76	0.30	1.06	3.40	3.69	7.09	84.98
31. Business Park[2]	tsf	1.20	0.23	1.43	0.30	0.99	1.29	10.20
40. Commercial Office[2]	tsf	1.55	0.19	1.74	0.21	1.29	1.50	11.56
51. Developed Park[2]	AC	0.00	0.00	0.00	0.03	0.04	0.07	2.60

du = Dwelling Units
tsf = Thousand Square Feet
STU = Students
AC = Acres
[1] *Includes private recreation centers.*
Trip rate sources:
[2] *Santa Clarita Valley Consolidated Transportation Model (SCVCTM)*
[3] *Institute of Transportation Engineers (ITE) Trip Generation 8th Edition, Category 255 (Continued Care Retirement Community)*
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis, October 2010, ***Appendix 4.5****.*

A description of the MXD model and the model's results for the Mission Village project is provided in Appendix E of the AFA Traffic Impacts Analysis in **Appendix 4.5**. The MXD analysis concluded that due to the specific characteristics of the proposed project, approximately one-third (33 percent) of the daily gross tripends would remain internal to the project site. Specific to the peak hours, approximately

29 percent of the AM peak hour tripends and approximately 30 percent of the PM peak hour tripends would remain internal to the project site, as summarized in **Table 4.5-11, Project MXD Trip Generation and Internalization Estimate**.[15]

Table 4.5-11
Project MXD Trip Generation/Internalization Estimate

Period	Gross Trips	Net External Trips	Vehicle Trip Internalization
Daily	57,878	38,922	33 percent
AM Peak Hour	5,101	3,615	29 percent
PM Peak Hour	5,889	4,123	30 percent

Source: Fehr & Peers
Note: Gross trips derived using MXD model and these values differ slightly (<1%) from SCVCTM/ITE estimates.

To illustrate how the complementary mix of land uses interact with each other, an approximation of the split of internal and external trips has been derived for each of the individual project land use categories, and is presented in **Table 4.5-12, Internal/External Trip Volumes and Percentages**. The individual project land uses will have varying amounts of internal capture based on the specific type of land use that is planned. For example, commercial office uses are anticipated to have approximately 20 percent overall internal capture, while the schools, library and parks are anticipated to have approximately 50 percent internal capture, with approximately 90 percent internalization during the peak hour in the peak direction. In addition, the balanced mix of project uses would result in approximately 30 percent of the overall residential tripends as internal trips. For additional information regarding the MXD model and internal capture, please see Final EIR Responses to Comments, **Topical Response No. 3, Internal Trip Capture Model and Methodology**.

(2) External Trips

As previously noted, the geographic distribution of project-generated external trips (i.e., those trips external to the project site) was derived by utilizing the SCVCTM, a computerized travel demand model. The SCVCTM first calculates production and attraction tripends for the proposed land uses and, by using the built in distribution functions of the model, an estimation of travel patterns for the project site is developed. The SCVCTM derives trip distribution patterns and related trip lengths based on mathematical functions that consider the amount of trips generated on a zone-by-zone basis, the type of trips generated, and the geographic relationship between these trips and the remainder of trips generated in the modeled area. Data input into the model includes details relevant to the specific land uses that

15 This data was reviewed and approved by the County Department of Public Works Traffic and Lighting Division staff in February 2010 for use in this traffic impact analysis.

would be developed in each travel analysis zone with implementation of the proposed project. The trip distribution process then utilizes a statistical probability formula to calculate the interchange of trips between travel analysis zones. As discussed above, the volume of trips internal and external to the project site has been derived using a model developed specifically for mixed-use developments of this type (MXD model). To derive the distribution patterns of the external trips, a special select zone trip assignment was prepared using the SCVCTM based on the total volume of external trips estimated by the MXD model.

Illustrations of the project's trip distribution patterns are provided in **Figure 4.5-11, Trip Distribution (%),** and **Figure 4.5-11a, Trip Distribution (%) Off-Site**, and are based on the adjusted SCVCTM select zone run. As shown on **Figure 4.5-11**, the model calculates that approximately 28 percent of the project's traffic would be distributed to Magic Mountain Parkway east of the project site and approximately 21 percent is distributed to Commerce Center Drive north of the site. Approximately 9 percent of the project's traffic is distributed to Westridge Parkway south of the project site, and approximately 8 percent is distributed to Magic Mountain Parkway west of the project site. Less than 1 percent of the project traffic is distributed to each of the four local streets that also access the project site (three streets that provide access to the Legacy Village project site and one street that provides access to the Entrada project site). Project only peak hour turning movement volumes for project buildout 2021 and long-range 2035 conditions are illustrated in EIR **Appendix 4.5,** Traffic Impacts Analysis, Figures 3-8 through 3-15.

(3) Commerce Center Drive Bridge

The initial access to the project site will be provided via the extensions of Magic Mountain Parkway and Westridge Parkway. As noted in the previous sections, an extension of Commerce Center Drive between SR-126 and the project site will provide access to the north, and a future extension of Magic Mountain Parkway to the west of the project site will provide access to the westerly areas of the Newhall Ranch Specific Plan area.

Since the initial occupancies within the project site are anticipated to occur prior to completion of the Commerce Center Drive connection, this section identifies the interim level of project development that could be accommodated without the Commerce Center Drive connection. This interim level of development is based on the amount of traffic that could be accommodated by the remaining roadways (i.e., the area roadways without the Commerce Center Drive connection), and is summarized in **Table 4.5-13, Land Use and Trip Generation without Commerce Center Drive Extension**.

Table 4.5-12
Internal/External Trip Volumes and Percentages

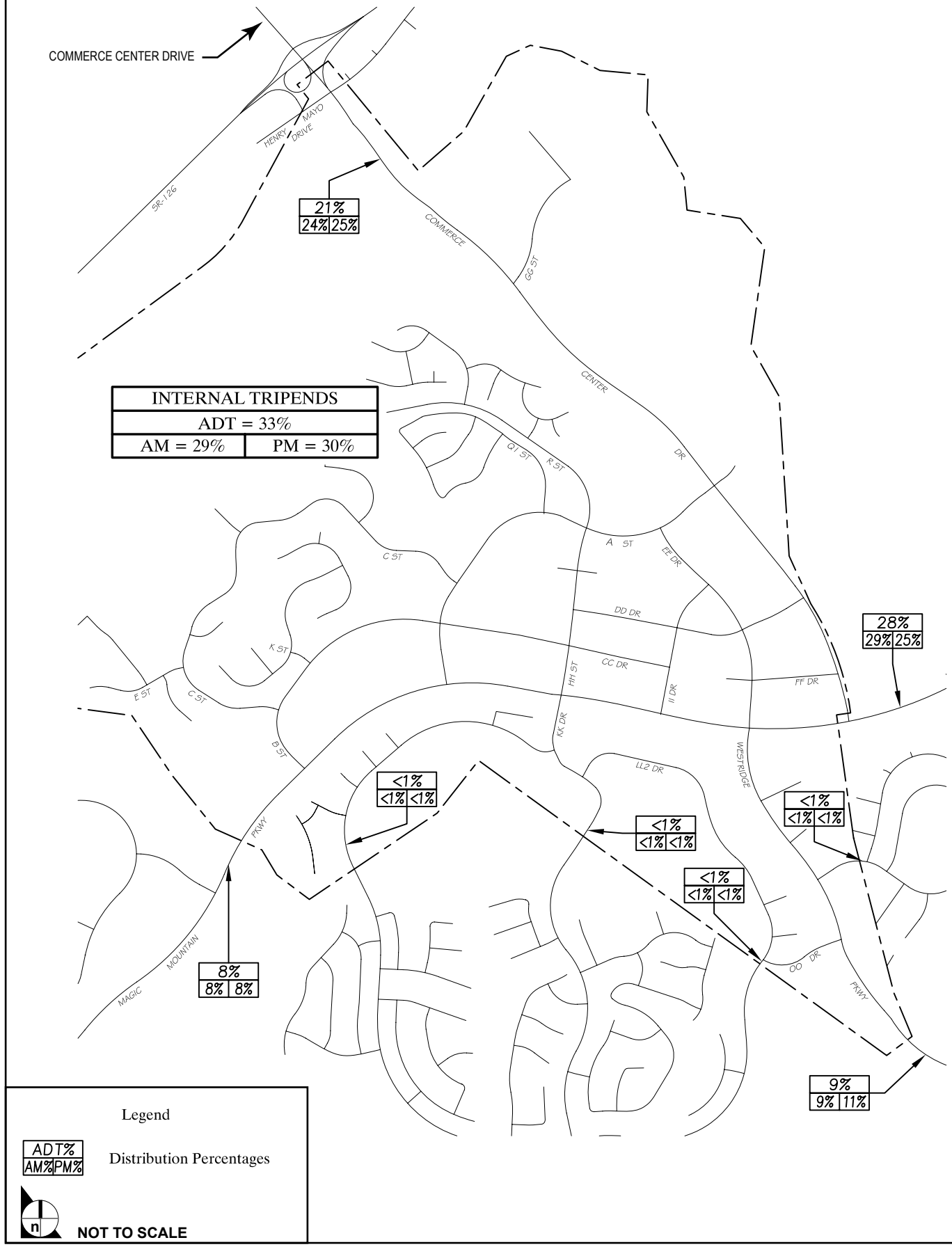
Land Use	Units		AM Peak Hour			PM Peak Hour			ADT
			IB	OB	Total	IB	OB	Total	
Traditional Residential									
Single Family (6–10 du/ac)	382	du	73	213	286	244	143	387	3,783
Condominium/Townhouse	2,315	du	234	1,110	1,344	1,086	604	1,690	18,520
Apartment	905	du	73	388	461	370	190	560	6,244
Sub-total	3,602	du	380	1,711	2,091	1,700	937	2,637	28,547
Internal %			30%	30%		25%	30%		30%
Tripends for Trips Internal to Site			114	513	627	425	281	706	8,564
Tripends for Trips External to Site			266	1,198	1,464	1,275	656	1,931	19,983
Active Senior Residential									
Senior (Active)	459	du	37	54	91	73	45	118	1,702
Internal %			20%	25%		30%	30%		30%
Tripends for Trips Internal to Site			7	14	21	22	14	36	511
Tripends for Trips External to Site			30	40	70	51	31	82	1,191
Continuing Care Senior Residential									
CCRC	351	du	42	21	63	49	53	102	986
Internal %			10%	10%		15%	15%		20%
Tripends for Trips Internal to Site			4	2	6	7	8	15	197
Tripends for Trips External to Site			38	19	57	42	45	87	789
School, Library & Parks									
Elementary/Middle School	900	STU	234	180	414	72	81	153	1,305
Library	36	tsf	27	11	38	122	133	255	3,059
Developed Park	40.9	AC	0	0	0	1	1	2	108
Sub-total			261	191	452	195	215	410	4,472
Internal %			90%	35%		45%	75%		50%
Tripends for Trips Internal to Site			235	67	302	88	161	249	2,236
Tripends for Trips External to Site			26	124	150	107	54	161	2,236
Commercial Retail									
Commercial Shops	224.1	tsf	162	107	269	404	404	808	8,306
Internal %			65%	65%		70%	55%		60%
Tripends for Trips Internal to Site			105	70	175	283	222	505	4,984
Tripends for Trips External to Site			57	37	94	121	182	303	3,322
Commercial Office									
Business Park	697	tsf	836	160	996	210	690	900	7,110
Commercial Office	634	tsf	983	120	1,103	132	819	951	7,329
Sub-total	1,331	tsf	1,819	280	2,099	342	1,509	1,851	14,439
Internal %			15%	15%		20%	15%		20%
Tripends for Trips Internal to Site			273	42	315	68	226	294	2,888
Tripends for Trips External to Site			1,546	238	1,784	274	1,283	1,557	11,551
Total									
Total Tripends			2,701	2,364	5,065	2,763	3,163	5,926	58,452
Total Tripends for Trips Internal to Site			738	708	1,446	893	912	1,805	19,380
Total Internal %			27%	30%	29%	32%	29%	30%	33%
Total Tripends for Trips External to Site			1,963	1,656	3,619	1,870	2,251	4,121	39,072

Table 4.5-13
Land Use and Trip Generation without Commerce Center Drive Extension

Land Use Type	Units	AM Peak Hour			PM Peak Hour			
		IB	OB	Total	IB	OB	Total	ADT
3. Single Family (6–10 du/ac)	250 du	48	140	188	160	93	253	2,475
4. Condominium/Townhouse	1,500 du	150	720	870	705	390	1,095	12,000
5. Apartment	500 du	40	215	255	205	105	310	3,450
7. Senior (Active)	300 du	24	36	60	48	30	78	1,113
8. CCRC	230 du	28	14	41	32	35	67	646
Residential Total	2,780 du	289	1,125	1,414	1,150	652	1,802	19,684
% of Total		17%	76%	45%	65%	33%	48%	53%
13. Commercial Shops	135 tsf	97	65	162	243	243	486	5,004
20. Elementary/Middle School	600 STU	156	120	276	48	54	102	870
24. Library	36 tsf	27	11	38	122	133	255	3,059
31. Business Park	420 tsf	504	97	601	126	416	542	4,284
40. Commercial Office	380 tsf	589	72	661	80	490	570	4,393
51. Developed Park1	40.9 AC	0	0	0	1	2	3	106
Non-Residential Total		1,374	364	1,738	620	1,338	1,958	17,717
% of Total		83%	24%	55%	35%	67%	52%	47%
TOTAL		1,663	1,489	3,152	1,771	1,990	3,760	37,401
% of Full Project		62%	63%	62%	64%	63%	63%	64%
External Trips		1,210	1,041	2,251	1,196	1,418	2,615	25,002
% External		73%	70%	71%	68%	71%	70%	67%

du = Dwelling Units
tsf = Thousand Square Feet
STU = Students
AC = Acres
[1] *Includes private recreation centers.*
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5****.*

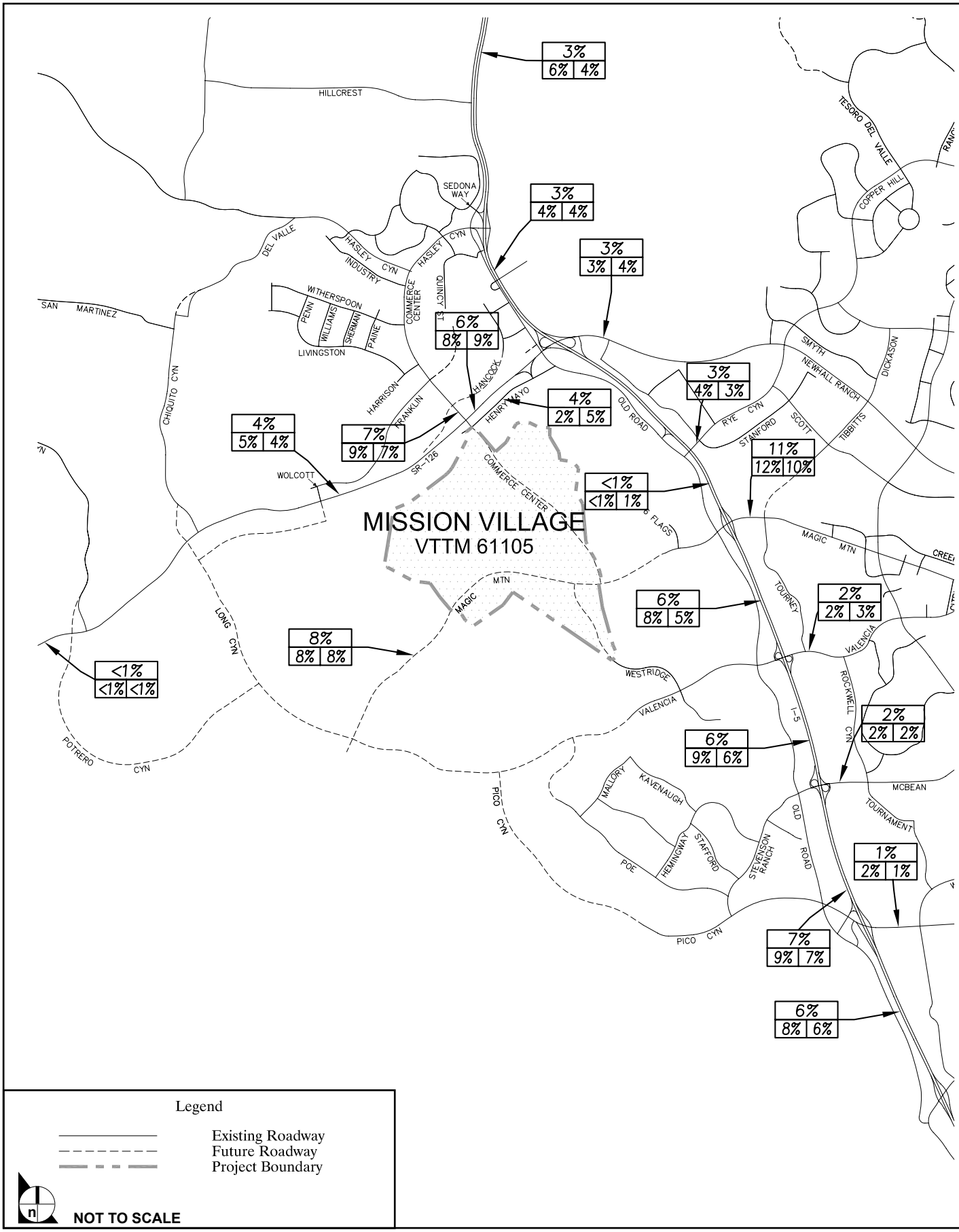
The interim level of development that can be accommodated without the Commerce Center Drive connection maintains the same ratio of residential to non-residential development as does the full project, and therefore is anticipated to achieve a rate of internal trip capture that is comparable to the full project. As shown on **Table 4.5-13**, this scenario would consist of 2,780 residential units and approximately 935,000 square feet of non-residential commercial development. **Table 4.5-13** also illustrates that this interim level of development would generate approximately 25,000 external trips daily (2,250 in the AM peak hour and 2,600 in the PM peak hour), which is roughly equivalent to the amount of project traffic that will be accommodated by each of the project access roadways other than the Commerce Center Drive connection.



SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-11**

Trip Distribution (%)



SOURCE: Austin Foust Associates, Inc. – October 2010

FIGURE **4.5-11a**

Trip Distribution (%) Off-Site

The land use mix depicted in **Table 4.5-13** represents one scenario that could be accommodated prior to construction of the Commerce Center Drive extension. However, multiple combinations of residential and non-residential development could result in similar amounts of off-site project traffic volumes and, therefore, could be accommodated prior to the construction of the Commerce Center Drive extension. The determining factor is that the net amount of off-site traffic generated by the project does not exceed the amounts indicated in **Table 4.5-13**.

Table 4.5-14, External Totals With and Without Commerce Center Drive Extension, summarizes the amount of project traffic that is anticipated to utilize the Commerce Center Drive connection to the north. As shown in **Table 4.5-14**, approximately 30 percent to 37 percent of the project's external traffic is anticipated to utilize the Commerce Center Drive connection to the north once the project is fully built out.

Table 4.5-14
External Trip Totals With and Without Commerce Center Drive Extension

	AM Peak Hour			PM Peak Hour			
	IB	OB	Total	IB	OB	Total	ADT
Total External Project Trips	1,960	1,660	3,620	1,870	2,250	4,120	39,000
Commerce Center Drive Bridge Volumes	590	620	1,210	680	770	1,450	12,000
% of Total	30%	37%	33%	36%	34%	35%	31%
Volumes for Remainder of Access Roadway	1,370	1,040	2,410	1,190	1,480	2,670	27,000
% of Total	70%	63%	67%	64%	66%	65%	69%

Source: Austin-Foust Associates, Inc., Mission Village Traffic Impact Analysis, April 2010, Table 4-13.

e. Project Impacts

As discussed above, the impacts of the proposed project relative to roadway capacities are assessed under four ~~three~~ different scenarios: (1) Existing plus Ambient plus Project, (2) 2021 Project Buildout Cumulative Conditions, ~~and~~ (3) Long-Range (2035) Cumulative Conditions, and (4) Existing plus Project Conditions. Scenarios 1, ~~and~~ 2 and 4 are each addressed separately below. The Long-Range 2035 Cumulative Conditions scenario is addressed in **subsection 10, Long-Range Cumulative Impacts**.

(1) Existing plus Ambient plus Project

As noted above, project occupancies are anticipated to begin in 2014 and reach buildout in 2021. Therefore, in accordance with the County of Los Angeles Traffic Study Guidelines, a 2021 horizon has been derived based on an annual ambient growth rate; that is, the project buildout traffic conditions are based on existing roadway conditions plus 12 years of ambient growth (2010 through 2021). For purposes of this analysis, a 2.0 percent ambient growth rate generally was utilized to represent growth that would occur absent any other cumulative developments.[16] This results in total ambient growth (i.e., growth not including cumulative development) of 24 percent between the 2009 traffic count year and the year 2021. The purpose of this scenario is to evaluate the impacts of the project in a setting that does not include the traffic from other future developments; hence, the use of this ambient growth factor. Future conditions inclusive of traffic generated by other future cumulative development projects are addressed in the other two impact scenarios.

The existing conditions plus ambient growth (2021 no project) peak hour turning movement volumes for the intersections in the project study area and ADT volumes for select roadway segments are shown in Section 4.1.2 of the AFA report in EIR **Appendix 4.5.** As shown on **Table 4.5-15, ICU and LOS Summary – Existing plus Ambient Conditions With and Without Project**, each of the intersections would operate at LOS D or better under without project conditions, with the exception of The Old Road/I-5 Southbound Ramps, which would operate at LOS E. As noted above, the City of Santa Clarita does not consider this hypothetical scenario in assessing impacts within the City.

Year 2021 peak hour turning movement volumes without and with traffic from the project at buildout (existing conditions plus ambient growth plus project) are depicted on Figures 4-9 through 4-12 in the AFA Traffic Impacts Analysis in EIR **Appendix 4.5**. Peak hour ICU values and the resulting LOS are depicted in EIR **Table 4.5-15, ICU and LOS Summary – Existing plus Ambient Conditions With and Without Project**, which provides a comparison between 2021 no-project and 2021 with-project conditions. As shown on **Table 4.5-15**, under this scenario the following County intersections would be significantly impacted as a result of project traffic:

28. The Old Road & McBean Parkway (County); and

94. Commerce Center Drive and SR-126 (Caltrans/County)

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16 The 2.0 percent annual growth rate was not applied to estimate traffic into and out of the Commerce Center area since Commerce Center development currently is capped at 9.3 million square feet until the Commerce Center Drive/SR-126 interchange is constructed. Therefore, for the Commerce Center Drive at SR-126 intersection only, County staff determined that the ambient growth rate applied for peak hour operations should be based on the specific volume of traffic occurring prior to reaching the cap on development. All other traffic movements through the intersection are evaluated based on the 2.0 percent annual growth rate.

Mitigation that would reduce the identified impacts to a level below significant is provided below.

Table 4.5-15
ICU and LOS Summary – Existing plus Ambient Conditions with and without Project

Intersection	Existing plus Ambient				Existing plus Ambient plus Project				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.86	D	.50	A	0.84	D	0.55	A	0.02	0.05
9. The Old Road & I-5 SB Ramps	0.88	D	1.11	F	0.88	D	1.06	F	0.00	0.05
10. I-5 SB Ramps & Magic Mountain Parkway	0.43	A	0.44	A	0.52	A	0.49	A	0.09	0.05
12. I-5 SB Ramps & Valencia Boulevard	0.62	B	0.55	A	0.68	B	0.59	A	0.06	0.04
14. I-5 SB Ramps & McBean Parkway	0.45	A	0.58	A	0.46	A	0.60	A	0.01	0.02
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.69	B	0.73	C	0.69	B	0.74	C	0.00	0.01
County Arterial Intersections										
25. The Old Road & Rye Canyon	0.74	C	0.79	C	0.65	B	0.79	C	0.09	0.00
26. The Old Road & Magic Mountain Parkway	0.32	A	0.38	A	0.49	A	0.43	A	0.17	0.05
27. The Old Road & Valencia Boulevard	0.80	C	0.53	A	0.82	D	0.58	A	0.02	0.05
28. The Old Road & McBean Parkway	0.70	B	0.92	E	0.78	C	0.95	E	**0.08**	**0.03**
29. The Old Road & Pico Canyon Road	0.75	C	0.84	D	0.75	C	0.84	D	0.00	0.00
94. Commerce Center Drive & SR-126	0.64	B	0.89	D	1.13	F	1.15	F	**0.49**	**0.26**
105. Westridge Parkway & Valencia Boulevard	0.66	B	0.22	A	0.71	C	0.35	A	0.05	0.13
108. Stevenson Ranch Parkway & Pico Canyon Road	0.57	A	0.62	B	0.58	A	0.62	B	0.01	0.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.77	C	0.47	A	0.77	C	0.48	A	0.00	0.01

Bold = Significant Impact (See criteria in Table 4.5-8)
Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

(2) Project Buildout Year 2021 Cumulative Conditions

As noted above, the proposed project is expected to reach buildout in year 2021; therefore, a horizon year of 2021 is utilized to evaluate project impacts. Under the scenario presented in this section, the impacts of

the proposed project are evaluated under Year 2021 cumulative conditions. As noted above, long-range cumulative conditions, which represent buildout of the Santa Clarita Valley, are derived by the SCVCTM based on the proposed County Area Plan and City of Santa Clarita General Plan updates. Year 2021 cumulative conditions have been derived using data interpolated from the long-range cumulative 2035 SCVCTM traffic forecasts. Impacts to arterial intersections and the I-5 freeway mainline are addressed separately below.

(a) Arterial Intersections

The 2021 no-project cumulative conditions peak hour turning movement volumes for the intersections in the project study area are depicted on Figures 4-1 through 4-4 in the AFA Traffic Impacts Analysis, EIR **Appendix 4.5. Table 4.5-16, ICU and LOS Summary – 2021 Cumulative Conditions With and Without Project**, depicts the ICU and LOS for each of the study area intersections under no-project conditions and provides a comparison between the no-project and the with-project conditions. As shown on **Table 4.5-16**, each of the intersections would operate at LOS D or better under without project conditions, with the exception of the following:

9. The Old Road & I-5 Southbound Ramps (LOS F PM)

25. The Old Road & Rye Canyon (LOS F AM/PM)

94. Commerce Center Drive & SR-126 (LOS F AM/PM)

45. McBean Pkwy & Magic Mountain Pkwy (LOS E PM)

48. McBean Pkwy & Newhall Ranch Road (LOS F PM)

65. Bouquet Canyon Road & Soledad Canyon Road (LOS E PM)

66. Bouquet Canyon Road & Newhall Ranch Road (LOS F PM)

The 2021 with-project cumulative conditions peak hour turning movement volumes for the intersections in the project study area are depicted on Figures 4-5 through 4-8 in the AFA Traffic Impacts Analysis, EIR **Appendix 4.5.** EIR **Table 4.5-16, ICU and LOS Summary – 2021 Cumulative Conditions With and Without Project**, depicts the ICU and LOS for each of the study area intersections under with project conditions and provides a comparison between the no-project and the with-project conditions. As shown on **Table 4.5-16**, under 2021 cumulative conditions, the following intersections are forecast to be significantly impacted by the project:

Table 4.5-16
ICU and LOS Summary – 2021 Cumulative Conditions With and Without Project

Intersection	2021 Cumulative without Project				2021 Cumulative with Project				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.83	D	0.70	B	0.85	D	0.75	C	**0.02**	**0.05**
9. The Old Road & I-5 SB Ramps	0.81	D	1.06	F	0.82	D	1.06	F	0.01	0.00
10. I-5 SB Ramps & Magic Mountain Parkway	0.58	A	0.56	B	0.64	B	0.62	B	0.06	0.06
12. I-5 SB Ramps & Valencia Boulevard	0.72	C	0.81	D	0.76	C	0.85	D	**0.04**	**0.04**
14. I-5 SB Ramps & McBean Parkway	0.52	A	0.71	C	0.54	A	0.73	C	0.02	0.02
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.61	B	0.69	B	0.62	B	0.71	C	0.01	0.02
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & Henry Mayo Drive (SR-126)	0.59	A	0.59	A	0.61	B	0.62	B	0.02	0.03
11. I-5 NB Ramps & Magic Mountain Parkway	0.60	A	0.61	B	0.68	B	0.70	B	0.08	0.09
13. I-5 NB Ramps & Valencia Boulevard	0.67	B	0.62	B	0.68	B	0.64	B	0.01	0.02
15. I-5 NB Ramps & McBean Parkway	0.52	A	0.57	A	0.53	A	0.59	A	0.01	0.02
17. I-5 NB On/Off & Lyons Avenue	0.51	A	0.75	C	0.52	A	0.77	C	0.01	0.02
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.03	F	1.21	F	1.09	F	1.25	F	**0.06**	**0.04**
26. The Old Road & Magic Mountain Parkway	0.43	A	0.51	A	0.60	A	0.59	A	0.17	0.08
27. The Old Road & Valencia Boulevard	0.68	B	0.60	A	0.71	C	0.73	C	0.03	0.13
28. The Old Road & McBean Parkway	0.53	A	0.85	D	0.54	A	0.88	D	0.01	**0.03**
29. The Old Road & Pico Canyon Road	0.71	C	0.80	C	0.74	C	0.82	D	0.03	0.02
94. Commerce Center Drive & SR-126	1.04	F	1.17	F	1.44	F	1.53	F	**0.40**	**0.36**
105. Westridge Parkway & Valencia Boulevard	0.53	A	0.38	A	0.58	A	0.51	A	0.05	0.13
108. Stevenson Ranch Parkway & Pico Canyon Road	0.60	A	0.55	A	0.60	A	0.56	A	0.00	0.01
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.57	A	0.46	A	0.57	A	0.46	A	0.00	0.00

Intersection	2021 Cumulative without Project				2021 Cumulative with Project				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
City Arterial Intersections										
30. Avenue Stanford & Rye Canyon Road	0.57	A	0.66	B	0.60	A	0.68	B	0.03	0.02
33. Copper Hill Drive & Newhall Ranch Road	0.72	C	0.77	C	0.75	C	0.80	C	0.03	0.03
City Arterial Intersections										
35. Copper Hill Drive & Decoro Drive	0.63	B	0.63	B	0.65	B	0.64	B	0.02	0.01
36. Tourney Road & Valencia Boulevard	0.51	A	0.60	A	0.52	A	0.62	B	0.01	0.02
37. Tourney Road & Magic Mountain Parkway	0.52	A	0.56	A	0.56	A	0.62	B	0.04	0.06
44. McBean Parkway & Valencia Boulevard	0.70	B	0.83	D	0.70	B	0.84	D	0.00	0.01
45. McBean Parkway & Magic Mountain Parkway	0.71	C	0.92	E	0.75	C	0.94	E	0.04	**0.02**
48. McBean Parkway & Newhall Ranch Road	0.78	C	1.01	F	0.79	C	1.05	F	0.01	**0.04**
49. McBean Parkway & Decoro Drive	0.70	B	0.60	A	0.72	C	0.61	B	0.02	0.01
51. Wiley Canyon Road & Lyons Avenue	0.65	B	0.83	D	0.66	B	0.84	D	0.01	0.01
54. Orchard Village Road & Wiley Canyon Road	0.65	B	0.75	C	0.65	B	0.75	C	0.00	0.00
55. Orchard Village Road & McBean Parkway	0.65	B	0.83	D	0.66	B	0.85	D	0.01	**0.02**
57. Valencia Boulevard & Magic Mountain Parkway	0.79	C	0.83	D	0.80	C	0.84	D	0.01	0.01
65. Bouquet Canyon Road & Soledad Canyon Road	0.79	C	0.91	E	0.80	C	0.91	E	0.01	0.00
66. Bouquet Canyon Road & Newhall Ranch Road[1]	0.81~~9~~	D	~~1.01~~ .87	D~~F~~	0.83 ~~91~~	D~~F~~	.88 ~~1.03~~	D~~F~~	**0.02**	-0.01 **~~0.02~~**

Bold = Significant Impact

Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5****.*

[1] See *Mission Village - Responses to Comments Analysis*, AFA (April 29, 2011), **Final EIR, Appendix F4.5**.

7. I-5 SB Ramps & Henry Mayo Drive (SR-126) (Caltrans/County)

12. I-5 SB Ramps & Valencia Boulevard (Caltrans/County)

25. The Old Road & Rye Canyon Road (County)

28. The Old Road & McBean Parkway (County)

45. McBean Parkway & Magic Mountain Parkway (City)

48. McBean Parkway & Newhall Ranch Road (City)

55. Orchard Village Road & McBean Parkway (City)

66. Bouquet Canyon Road & Newhall Ranch Road (City)

94. Commerce Center Drive & SR-126 (County)

Mitigation that would reduce the identified impacts to a level below significant is provided below.

(b) Freeway Mainline

The proposed project would be located approximately 1.25 miles west of I-5, and approximately 0.5 mile south of SR-126. In the vicinity of the project site, I-5 is generally an eight-lane (four lanes in each direction) freeway. SR-126 is generally a four-lane highway between I-5 and Commerce Center Drive and it transitions to a two-lane highway west of Commerce Center Drive.

As discussed above, the I-5 freeway currently operates at an acceptable level of service within the Santa Clarita Valley, with the exception of the southbound segments just north and south of the SR-14 interchange. Also as noted above, a Caltrans project currently is underway to add one HOV lane in each direction to the I-5 within the Santa Clarita Valley from SR-14 to Parker Road, as well as add new dedicated truck lanes south of Pico Canyon Road. The first stage of that project will address the existing deficiency between Calgrove and SR-14 by adding dedicated truck lanes to that segment.

South of the SR-14, Caltrans currently is constructing the I-5/SR-14 Direct HOV Connector project. This project involves the construction of an elevated two-lane direct HOV connector at the I-5 and SR-14 interchange, and construction of HOV lanes in the north- and southbound directions of I-5 at the interchange, which will address the existing deficiency south of SR-14.

The volume of project traffic forecast to utilize the State highway system is summarized in **Table 4.5-17, Project Only Peak Hour Volumes – State Highway System (Buildout Conditions)**. **Table 4.5-17** shows how the project's peak hour directional volumes within the Santa Clarita Valley vary from 0 to 269 vehicles per hour on I-5, and vary from 78 to 331 vehicles per hour on SR-126. South of the Santa Clarita Valley, the project's peak hour directional volumes are less than 150 vehicles per hour. North of the Santa Clarita Valley, the project's peak hour directional volumes are less than 90 vehicles per hour.

The results of an evaluation of the I-5 freeway for conditions with and without the project <u>are</u> ~~is~~ provided in **Table 4.5-18, Freeway Volumes and V/C Ratios - 2021 Conditions <u>(HOV 2000 VPH)</u>** <u>and **Table 4.5-18A, Freeway Volumes and V/C Ratios - 2021 Conditions (HOV 1600 VPH)**.</u> The analysis is based on a 2021 horizon, which represents the estimated buildout year of the project. Year 2021 traffic volumes have

been derived by interpolating between existing (2010) traffic counts and the SCVCTM Year 2035 long-range cumulative buildout conditions traffic forecasts. ~~While~~ Since the entire I-5 Truck Lane and HOV project is anticipated to be completed in 2016, well in advance of ~~by~~ 2021 project buildout, ~~only the first stage of improvements (the truck lane portion of the project)~~ the improvement has been assumed to be in place for the analysis of the 2021 horizon ~~in order to present a worst case scenario~~.[17] The analysis was conducted utilizing two different capacity assumptions for the HOV lanes -- 2000 VPH and 1600 VPH. The 2000 VPH capacity is the same threshold utilized by Caltrans in connection with its review of the I-5 Improvement Project presently underway on the freeway, as well as the threshold utilized under the County's CMP for freeway impacts analyses. The 1600 VPH capacity analysis was conducted at the request of Caltrans staff and is based on its desire to achieve an operating condition for the HOV lanes that is better than the operating condition for the general purpose lanes.

Table 4.5-17
Project Only Peak Hour Volumes - State Highway System (Buildout Conditions)

I-5 Freeway				
	AM Peak Hour		PM Peak Hour	
Segment	NB	SB	NB	SB
401. North of Lake Hughes	32	87	66	34
402. Between Lake Hughes & Parker	45	129	112	50
403. Between Parker & Hasley Canyon	53	174	152	72
404. Between Hasley Canyon & SR-126	53	162	152	59
405. Between SR-126 & Rye Canyon	0	33	23	52
406. Between Rye Canyon & Magic Mtn	0	27	23	61
407. Between Magic Mtn & Valencia	142	269	113	183
408. Between Valencia & McBean	200	243	144	227
409. Between McBean & Pico/Lyons	261	201	155	263
410. Between Pico/Lyons & Calgrove	233	150	123	241
411. Between Calgrove & SR-14	217	120	109	225
412. South of SR-14	133	109	90	141

[17] In September 2009, Caltrans approved a Final Environmental Impact Report/Environmental Assessment for the I-5 HOV/Truck Lanes Project SR-14 to Parker Road, or I-5 Improvement Project. (See Draft EIR Appendix 4.5.) The improvement project will add: one HOV lane in each direction on I-5 from the SR-14 interchange north to Parker Road; truck climbing lanes in each direction from the SR-14 interchange to Calgrove Boulevard (northbound) and Pico Canyon Road/Lyons Avenue (southbound); and full auxiliary lanes within portions of the Project study area. The Caltrans EIR/EIS reports the project is included in the 2008 Regional Transportation Plan and is fully funded, and construction is anticipated to begin in 2011, with completion scheduled for 2015. Subsequent communications with Caltrans indicate that the first phase of construction, or Early Implementation Project, is estimated to be completed in July, 2013, and the full project is estimated to be completed in February, 2016. (See TIA Appendix K; see also, Caltrans comment letter, A5 for additional information regarding project status.)

SR-126 Highway				
	AM Peak Hour		PM Peak Hour	
Segment	EB	WB	EB	WB
501. Between I-5 and Commerce Center	174	206	331	170
502. West of Commerce Center	154	78	110	129

The freeway impact analysis is based on the Los Angeles County CMP impact criteria. This criteria identifies a significant project impact when project traffic causes or worsens LOS F conditions by a V/C of 0.02 or more. ~~As previously discussed, Caltrans has not adopted criteria for the evaluation of impacts resulting from the development of private projects such as the proposed project; therefore, the CMP impact criteria is applied to this analysis.~~

2000 VPH HOV Lanes

As shown in **Table 4.5-18**, under the 2021 buildout horizon year cumulative analysis utilizing a 2000 VPH capacity for the HOV lanes, the incremental increase in traffic caused by the proposed project would not result in significant impacts to the I-5 freeway.

1600 VPH HOV Lanes

As shown in **Table 4.5-18A**, under the 2021 buildout horizon year cumulative analysis utilizing a 1600 VPH capacity for the HOV lanes, all lanes are forecast to operate at a V/C ratio less than 1.00 for the project's buildout year under cumulative conditions and, therefore, the incremental increase in traffic caused by the proposed project would not result in significant impacts to the I-5 freeway under this scenario.

Table 4.5-18
Freeway Volumes and V/C Ratios – 2021 Conditions (HOV 2000 VPH)

Segment		Lanes	Capacity	2021 Without Project				2021 With Project				Project Increment	
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
Northbound													
401.	North of Lake Hughes	4M	8,000	2,200	0.28	4,000	0.50	2,232	0.28	4,066	0.51	0.00	0.01
402.	Between Lake Hughes & Parker	4M	8,000	2,400	0.30	4,700	0.59	2,445	0.31	4,812	0.60	0.01	0.01
403.	Between Parker & Hasley Canyon	4M + 1H	10,000	2,700	0.27	5,600	0.56	2,753	0.28	5,752	0.58	0.01	0.02
404.	Between Hasley Canyon & SR-126	4M + 1H + 1A	11,000	3,800	0.35	6,300	0.57	3,853	0.35	6,452	0.59	0.00	0.02
405.	Between SR-126 & Rye Canyon	4M + 1H	10,000	4,400	0.44	6,000	0.60	4,400	0.44	6,023	0.60	0.00	0.00
406.	Between Rye Canyon & Magic Mtn	4M + 1H	10,000	4,400	0.44	6,000	0.60	4,400	0.44	6,023	0.60	0.00	0.00
407.	Between Magic Mtn & Valencia	4M + 1H + 1A	11,000	5,300	0.48	6,400	0.58	5,442	0.49	6,513	0.59	0.01	0.01
408.	Between Valencia & McBean	4M + 1H	10,000	6,300	0.63	7,200	0.72	6,500	0.65	7,344	0.73	0.02	0.01
409.	Between McBean & Pico/Lyons	4M + 1H	10,000	6,300	0.63	7,200	0.72	6,561	0.66	7,355	0.74	0.03	0.02
410.	Between Pico/Lyons & Calgrove	4M + 1H + 1A	11,000	6,200	0.56	7,400	0.67	6,433	0.58	7,523	0.68	0.02	0.01
411.	Between Calgrove & SR-14	4M + 1H + 1T	11,200	6,200	0.55	7,400	0.66	6,417	0.57	7,509	0.67	0.02	0.01
412.	South of SR-14	6M + 1H + 2T	16,400	8,200	0.50	15,200	0.93	8,333	0.51	15,290	0.93	0.01	0.00
Southbound													
401.	North of Lake Hughes	4M	8,000	2,800	0.35	3,800	0.48	2,887	0.36	3,834	0.48	0.01	0.00
402.	Between Lake Hughes & Parker	4M	8,000	3,400	0.43	4,100	0.51	3,529	0.44	4,150	0.52	0.01	0.01
403.	Between Parker & Hasley Canyon	4M + 1H	10,000	4,300	0.43	4,800	0.48	4,474	0.45	4,872	0.49	0.02	0.01
404.	Between Hasley Canyon & SR-126	4M + 1H	10,000	5,000	0.50	5,700	0.57	5,162	0.52	5,759	0.58	0.02	0.01
405.	Between SR-126 & Rye Canyon	4M + 1H	11,000	5,200	0.47	6,300	0.57	5,233	0.48	6,352	0.58	0.01	0.01

Segment		Lanes	Capacity	2021 Without Project				2021 With Project				Project Increment	
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
		+ 1A											
406.	Between Rye Canyon & Magic Mtn	4M + 1H + 1A	11,000	5,700	0.52	7,500	0.68	5,727	0.52	7,561	0.69	0.00	0.01
407.	Between Magic Mtn & Valencia	4M + 1H	10,000	5,800	0.58	7,400	0.74	6,069	0.61	7,583	0.76	0.03	0.02
408.	Between Valencia & McBean	4M + 1H + 1A	11,000	6,900	0.63	8,100	0.74	7,143	0.65	8,327	0.76	0.02	0.02
409.	Between McBean & Pico/Lyons	4M + 1H	10,000	7,100	0.71	8,000	0.80	7,301	0.73	8,263	0.83	0.02	0.03
410.	Between Pico/Lyons & Calgrove	4M + 1H + 1T	11,200	7,300	0.65	8,200	0.73	7,450	0.67	8,441	0.75	0.02	0.02
411.	Between Calgrove & SR-14	4M + 1H + 2T	12,400	7,500	0.60	8,300	0.67	7,620	0.61	8,525	0.69	0.01	0.02
412.	South of SR-14	6M + 1H + 2T	16,400	15,100	0.92	11,300	0.69	15,209	0.93	11,441	0.70	0.01	0.01

M = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
H = HOV Lane (Capacity = 2,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
A = Auxiliary Lane (Capacity = 1,000 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5***

Table 4.5-18A
Freeway Volumes and V/C Ratios - 2021 Conditions (HOV 1600 VPH)

				2021 Without Project				2021 With Project				Project Increment	
		Capacities		MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
Segment	Lanes	MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
Northbound - AM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	2,200	0.28	n/a	n/a	2,232	0.28	n/a	n/a	0.00	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	2,400	0.30	n/a	n/a	2,445	0.31	n/a	n/a	0.01	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	2,390	0.30	310	0.19	2,433	0.30	320	0.20	0.00	0.01
404. Between Hasley Canyon & SR-126	4M + 1H + 1A	9,000	1,600	3,450	0.38	350	0.22	3,493	0.39	360	0.23	0.01	0.01
405. Between SR-126 & Rye Canyon	4M + 1H	8,000	1,600	3,900	0.49	500	0.31	3,900	0.49	500	0.31	0.00	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H	8,000	1,600	3,880	0.49	520	0.33	3,880	0.49	520	0.33	0.00	0.00
407. Between Magic Mtn & Valencia	4M + 1H+ 1A	9,000	1,600	4,750	0.53	550	0.34	4,882	0.54	560	0.35	0.01	0.01
408. Between Valencia & McBean	4M + 1H	8,000	1,600	5,710	0.71	590	0.37	5,890	0.74	610	0.38	0.03	0.01
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	5,650	0.71	650	0.41	5,881	0.74	680	0.43	0.03	0.02
410. Between Pico/Lyons & Calgrove	4M + 1H+ 1A	9,000	1,600	5,540	0.62	660	0.41	5,753	0.64	680	0.43	0.02	0.02
411. Between Calgrove & SR-14	4M + 1H + 1T	9,200	1,600	5,540	0.60	660	0.41	5,737	0.62	680	0.43	0.02	0.02
412. South of SR-14	6M + 1H + 2T	14,400	1,600	7,500	0.52	700	0.44	7,623	0.53	710	0.44	0.01	0.00

				2021 Without Project				2021 With Project				Project Increment	
		Capacities		MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
Segment	Lanes	MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
Northbound - PM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	4,000	0.50	n/a	n/a	4,066	0.51	n/a	n/a	0.01	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	4,700	0.59	n/a	n/a	4,812	0.60	n/a	n/a	0.01	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	5,120	0.64	480	0.30	5,252	0.66	500	0.31	0.02	0.01
404. Between Hasley Canyon & SR-126	4M + 1H + 1A	9,000	1,600	5,790	0.64	510	0.32	5,922	0.66	530	0.33	0.02	0.01
405. Between SR-126 & Rye Canyon	4M + 1H	8,000	1,600	5,380	0.67	620	0.39	5,403	0.68	620	0.39	0.01	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H	8,000	1,600	5,350	0.67	650	0.41	5,373	0.67	650	0.41	0.00	0.00
407. Between Magic Mtn & Valencia	4M + 1H+ 1A	9,000	1,600	5,740	0.64	660	0.41	5,843	0.65	670	0.42	0.01	0.01
408. Between Valencia & McBean	4M + 1H	8,000	1,600	6,430	0.80	770	0.48	6,564	0.82	780	0.49	0.02	0.01
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	6,410	0.80	790	0.49	6,545	0.82	810	0.51	0.02	0.02
410. Between Pico/Lyons & Calgrove	4M + 1H+ 1A	9,000	1,600	6,610	0.73	790	0.49	6,723	0.75	800	0.50	0.02	0.01
411. Between Calgrove & SR-14	4M + 1H + 1T	9,200	1,600	6,590	0.72	810	0.51	6,689	0.73	820	0.51	0.01	0.00
412. South of SR-14	6M + 1H + 2T	14,400	1,600	13,780	0.96	1,420	0.89	13,860	0.96	1,430	0.89	0.00	0.00
Southbound - AM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	2,800	0.35	n/a	n/a	2,887	0.36	n/a	n/a	0.01	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	3,400	0.43	n/a	n/a	3,529	0.44	n/a	n/a	0.01	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	3,920	0.49	380	0.24	4,074	0.51	400	0.25	0.02	0.01

				2021 Without Project				2021 With Project				Project Increment	
		Capacities		MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
Segment	Lanes	MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
404. Between Hasley Canyon & SR-126	4M + 1H	8,000	1,600	4,600	0.58	400	0.25	4,742	0.59	420	0.26	0.01	0.01
405. Between SR-126 & Rye Canyon	4M + 1H+ 1A	9,000	1,600	4,760	0.53	440	0.28	4,793	0.53	440	0.28	0.00	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H+ 1A	9,000	1,600	5,250	0.58	450	0.28	5,277	0.59	450	0.28	0.01	0.00
407. Between Magic Mtn & Valencia	4M + 1H	8,000	1,600	5,330	0.67	470	0.29	5,569	0.70	500	0.31	0.03	0.02
408. Between Valencia & McBean	4M + 1H+ 1A	9,000	1,600	6,400	0.71	500	0.31	6,623	0.74	520	0.33	0.03	0.02
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	6,580	0.82	520	0.33	6,761	0.85	540	0.34	0.03	0.01
410. Between Pico/Lyons & Calgrove	4M + 1H + 1T	9,200	1,600	6,770	0.74	530	0.33	6,900	0.75	550	0.34	0.01	0.01
411. Between Calgrove & SR-14	4M + 1H + 2T	10,400	1,600	6,970	0.67	530	0.33	7,080	0.68	540	0.34	0.01	0.01
412. South of SR-14	6M + 1H + 2T	14,400	1,600	13,690	0.95	1,410	0.88	13,789	0.96	1,420	0.89	0.01	0.01
Southbound - PM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	3,800	0.48	n/a	n/a	3,834	0.48	n/a	n/a	0.00	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	4,100	0.51	n/a	n/a	4,150	0.52	n/a	n/a	0.01	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	4,370	0.55	430	0.27	4,432	0.55	440	0.28	0.00	0.01
404. Between Hasley Canyon & SR-126	4M + 1H	8,000	1,600	5,240	0.66	460	0.29	5,289	0.66	470	0.29	0.00	0.00
405. Between SR-126 & Rye Canyon	4M + 1H+ 1A	9,000	1,600	5,820	0.65	480	0.30	5,862	0.65	490	0.31	0.00	0.01
406. Between Rye Canyon & Magic Mtn	4M + 1H+ 1A	9,000	1,600	6,970	0.77	530	0.33	7,021	0.78	540	0.34	0.01	0.01
407. Between Magic Mtn & Valencia	4M + 1H	8,000	1,600	6,800	0.85	600	0.38	6,973	0.87	610	0.38	0.02	0.00
408. Between Valencia & McBean	4M + 1H+ 1A	9,000	1,600	7,420	0.82	680	0.43	7,637	0.85	690	0.43	0.03	0.00

				2021 Without Project				2021 With Project				Project Increment	
		Capacities		MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
Segment	Lanes	MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	7,230	0.90	770	0.48	7,483	0.94	780	0.49	0.04	0.01
410. Between Pico/Lyons & Calgrove	4M + 1H + 1T	9,200	1,600	7,420	0.81	780	0.49	7,641	0.83	800	0.50	0.02	0.01
411. Between Calgrove & SR-14	4M + 1H + 2T	10,400	1,600	7,520	0.72	780	0.49	7,725	0.74	800	0.50	0.02	0.01
412. South of SR-14	6M + 1H + 2T	14,400	1,600	10,330	0.72	970	0.61	10,461	0.73	980	0.61	0.01	0.00

MF (or M) = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
HOV (or H) = HOV Lane (Capacity = 1,600 vehicles per hour)
A = Auxiliary Lane (Capacity = 1,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.

(3) Existing Plus Project Scenario

Under this scenario, the proposed project's buildout traffic volumes are added to the existing traffic volumes and roadway configuration, and impacts are assessed. This scenario is regarded by traffic engineers as a hypothetical scenario when used in connection with a long-range development project such as the proposed Mission Village project, which is not anticipated to reach full buildout until approximately 2021. The scenario is hypothetical because it assumes that the proposed project would be fully built out immediately and the corresponding full buildout traffic volumes added to existing roadway volumes and infrastructure. Thus, the existing plus project analysis presumes that the existing environment (existing traffic volumes, existing roadway infrastructure, and existing land uses) will not change over the long-term buildout of the project. As a result, future increases in traffic volumes attributable to other development projects (i.e., cumulative traffic volumes) are not accounted for in the analysis. This results in the analysis potentially understating project impacts because capacity that otherwise would be utilized by future development that precedes the proposed project is now available to the project. On the other hand, because the scenario does not account for future planned roadway network improvements that would increase roadway capacities, the analysis potentially results in overstating project impacts. Furthermore, because the analysis does not take into account future development and related changing land uses, the analysis does not account for the corresponding change in trip distribution patterns that accompanies changing land uses.

Notwithstanding, an existing plus project analysis has been conducted and the results of the analysis are summarized below. (See **Final EIR Appendix F4.5**, Mission Village Traffic Impact Analysis – Existing Plus Project Scenario, AFA, for additional details, including ICU worksheets.) Because of the hypothetical nature of the scenario, the analysis presented below is provided for comparative purposes only; the proposed project's significance determinations and corresponding mitigation measures are based on the analysis presented under the following three scenarios: (1) Existing plus Ambient Growth plus Project; (2) Year 2021 Cumulative Conditions with Project; and (3) Year 2035 Cumulative Buildout Conditions with Project.

Peak hour ICU values for existing conditions both with and without the proposed project are presented below in **Table 4.5-18B, ICU and LOS Summary – Existing Conditions With and Without Project**. The table provides a comparison between the existing without-project condition and with-project conditions. As shown on the table, under existing plus project conditions, the following intersections would be significantly impacted by the proposed project:

25. The Old Road & Rye Canyon Road (County)

45. McBean Parkway & Magic Mountain Parkway (City)

48. McBean Parkway & Newhall Ranch Road (City)

66. Bouquet Canyon Road & Newhall Ranch Road (City)

94. Commerce Center Drive & SR-126 (Caltrans/County)

In comparison, under the Existing plus Ambient plus Project analysis and the 2021 Project Buildout Cumulative Conditions analysis (pp. 4.5-50 to 4.5-53, supra), the proposed project would result in significant impacts to the above five intersections, as well as the following additional four intersections:

7. I-5 SB Ramps & Henry Mayo Drive (SR-126) (Caltrans/County)

12. I-5 SB Ramps & Valencia Boulevard (Caltrans/County)

28. The Old Road & McBean Parkway (County)

55. Orchard Village Road & McBean Parkway (City)

Table 4.5-18B
ICU and LOS Summary – Existing Conditions With and Without Project

Intersection	Existing Conditions without Project				Existing Conditions with Project				Project Increment	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	.71	C	.43	A	.68	B	.42	A	-.03	-.01
9. The Old Road & I-5 SB Ramps	.72	C	.91	E	.72	C	.91	E	.00	.00
10. I-5 SB Ramps & Magic Mountain Parkway	.36	A	.37	A	.52	A	.48	A	.16	.11
12. I-5 SB Ramps & Valencia Boulevard	.52	A	.46	A	.61	B	.61	B	.09	.15
14. I-5 SB Ramps & McBean Parkway	.38	A	.50	A	.38	A	.51	A	.00	.01
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	.58	A	.59	A	.59	A	.62	B	.01	.03
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & Henry Mayo Drive (SR-126)	.66	B	.68	B	.66	B	.68	B	.00	.00
11. I-5 NB Ramps & Magic Mountain Parkway	.42	A	.42	A	.60	A	.49	A	.18	.07
13. I-5 NB Ramps & Valencia Boulevard	.59	A	.49	A	.61	B	.52	A	.02	.03
15. I-5 NB Ramps & McBean Parkway	.43	A	.48	A	.44	A	.52	A	.01	.04
17. I-5 NB On/Off & Lyons Avenue	.53	A	.66	B	.55	A	.68	B	.02	.02

Intersection	Existing Conditions without Project				Existing Conditions with Project				Project Increment	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
County Arterial Intersections										
25. The Old Road & Rye Canyon	.61	B	.66	B	.62	B	.82	D	.01	**.16**
26. The Old Road & Magic Mountain Parkway	.28	A	.32	A	.66	B	.43	A	.38	.11
27. The Old Road & Valencia Boulevard	.67	B	.44	A	.72	C	.60	A	.05	.16
28. The Old Road & McBean Parkway	.58	A	.76	C	.72	C	.79	C	.14	.03
29. The Old Road & Pico Canyon Road	.63	B	.71	C	.62	B	.72	C	-.01	.01
94. Commerce Center Drive & SR-126	.54	A	.78	C	.86	D	.90	D	**.32**	**.12**
105. Westridge Parkway & Valencia Boulevard	.55	A	.20	A	.73	C	.67	B	.18	.47
108. Stevenson Ranch Parkway & Pico Canyon Road	.49	A	.51	A	.49	A	.51	A	.00	.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	.63	B	.39	A	.65	B	.40	A	.02	.01
City Arterial Intersections										
30. Avenue Stanford & Rye Canyon Road	.51	A	.54	A	.54	A	.61	B	.03	.07
33. Copper Hill Drive & Newhall Ranch Road	.63	B	.70	B	.65	B	.74	C	.02	.04
35. Copper Hill Drive & Decoro Drive	.57	A	.51	A	.59	A	.53	A	.02	.02
36. Tourney Road & Valencia Boulevard	.45	A	.48	A	.47	A	.49	A	.02	.01
37. Tourney Road & Magic Mountain Parkway	.49	A	.45	A	.54	A	.55	A	.05	.10
44. McBean Parkway & Valencia Boulevard	.61	B	.74	C	.62	B	.75	C	.01	.01
45. McBean Parkway & Magic Mountain Parkway	.61	B	.76	C	.71	C	.81	D	.10	**.05**
48. McBean Parkway & Newhall Ranch Road	.73	C	.78	C	.76	C	.85	D	.03	**.07**
49. McBean Parkway & Decoro Drive	.77	C	.54	A	.78	C	.56	A	.01	.02
51. Wiley Canyon Road & Lyons Avenue	.60	A	.69	B	.62	B	.72	C	.02	.03
54. Orchard Village Road & Wiley Canyon Road	.60	A	.62	B	.61	B	.64	B	.01	.02
55. Orchard Village Road & McBean Parkway	.57	A	.68	B	.59	A	.70	B	.02	.02
57. Valencia Boulevard & Magic Mountain Parkway	.58	A	.66	B	.62	B	.70	B	.04	.04

Intersection	Existing Conditions without Project				Existing Conditions with Project				Project Increment	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
65. Bouquet Canyon Road & Soledad Canyon Road	.68	B	.77	C	.71	C	.77	C	.03	.00
66. Bouquet Canyon Road & Newhall Ranch Road	.66	B	.82	D	.69	B	.84	D	.03	**.02**
Bold = Significant Impact *Level of service ranges: .00 - .60 A .61 - .70 B .71 - .80 C .81 - .90 D .91 - 1.00 E Above 1.00 F*										

Roadway improvements that would mitigate the identified impacts are presented below in **Table 4.5-18C, Mitigation Measures for Project Intersection Impacts – Existing Conditions With Project**. **Table 4.5-18D, ICU and LOS Summary – With Mitigation**, summarizes the resulting ICUs and LOS with the mitigation in place.

Table 4.5-18C
Mitigation Measures for Project Intersection Impacts – Existing Conditions With Project

Location	Jurisdiction	Mitigation
25. The Old Road & Rye Canyon Road	County	Add a 2nd northbound through lane and a 2nd southbound left-turn lane. Convert the northbound and westbound free-flow right-turn lanes to conventional right-turn lanes with overlap phasing.
45. McBean Parkway & Magic Mountain Parkway	City	Add right-turn overlap phase for the westbound right-turn lane.
48. McBean Parkway & Newhall Ranch Road	City	Re-stripe the northbound approach to provide dual right-turn lanes in conjunction with appropriate pedestrian safety enhancements.
66. Bouquet Canyon Road & Newhall Ranch Road	City	Add right-turn overlap phase for the westbound right-turn lane.
94. Commerce Center & SR-126	Caltrans/County	Existing intersection to be replaced by a grade separated interchange. (Project is in the final design stage)

Table 4.5-18D
ICU and LOS Summary – With Mitigation

Intersection	Existing Conditions without Project				Existing Conditions plus Project with Mitigation				Change	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
25. The Old Road & Rye Canyon	.61	B	.66	B	.62	B	.67	B	.01	.01
45. McBean Parkway & Magic Mountain Parkway	.61	B	.76	C	.71	C	.79	C	.10	.03
48. McBean Parkway & Newhall Ranch Road	.73	C	.78	C	.76	C	.79	C	.03	.01
66. Bouquet Canyon Road & Newhall Ranch Road	.66	B	.82	D	.69	B	.81	D	.03	-.01
94. Commerce Center & SR-126	.54	A	.78	C	n/a (Grade Separated Interchange)					

Bold = Significant Impact
Level of service ranges: .00 - .60 A .71 - .80 C .91 - 1.00 E
.61 - .70 B .81 - .90 D Above 1.00 F

In addition to an intersection level of service analysis, an evaluation of the I-5 freeway under the Existing plus Project scenario also was conducted.

In the vicinity of the proposed project site, I-5 generally is an eight-lane (four lanes in each direction) freeway. At the I-5/SR-14 interchange, Caltrans currently is constructing the I-5/SR-14 Direct HOV Connector project, which will address the existing deficiency on I-5 south of SR-14. The I-5/SR-14 interchange project includes the construction of an elevated two-lane direct HOV connector at the I-5 and SR-14 interchange, and construction of high occupancy vehicle (HOV) lanes in the north- and southbound directions of I-5 south of the interchange. The project is approximately 60 percent complete at this time and is anticipated to be completed in Fall 2012. (**Final EIR, Appendix F4.5**, I-5/SR-14 Direct HOV Connector Project Status.) In addition, Caltrans previously approved the I-5 HOV/Truck Lanes Project SR-14 to Parker Road, which will add: one HOV lane in each direction on I-5 from the SR-14 interchange north to Parker Road; truck climbing lanes in each direction from the SR-14 interchange to Calgrove Boulevard (northbound) and Pico Canyon Road/Lyons Avenue (southbound); and full auxiliary lanes within portions of the project study area (I-5 Improvement Project). (See Draft EIR Appendix 4.5.) The I-5 Improvement Project is estimated to be completed in February 2016, also well before the planned buildout of Mission Village. Notwithstanding, under the Existing plus Project analysis, neither the I-5/SR-14 Direct HOV Connector project nor the I-5 Improvement Project is considered as part of the analysis.

Table 4.5-18E, Freeway Volumes and V/C Ratios – Existing Plus Project Conditions, presents the results of the analysis, illustrating conditions with and without the proposed Mission Village project. As shown

on **Table 4.5-18E**, under the Existing plus Project scenario, without the I-5/SR-14 HOV Direct Connector Project or the I-5 Improvement Project in place, the following I-5 freeway segments would be significantly impacted by the proposed project:

411. Southbound I-5 between Calgrove & SR-14; and

412. South of SR-14 between SR-14 and I-210.

Table 4.5-18E
Freeway Volumes and V/C Ratios – Existing + Project Conditions

Segment		Lanes	Capacity	Existing Without Project				Existing With Project				Project Increment	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
Northbound													
401	North of Lake Hughes	4M	8,000	1,300	.16	2,200	.28	1,314	.16	2,241	.28	.00	.00
402	Between Lake Hughes & Parker	4M	8,000	1,400	.18	2,500	.31	1,418	.18	2,567	.32	.00	.01
403	Between Parker & Hasley Canyon	4M	8,000	1,700	.21	3,100	.39	1,731	.22	3,197	.40	.01	.01
404	Between Hasley Canyon & SR-126	4M	8,000	2,300	.29	4,100	.51	2,198	.27	4,196	.52	-.02	.01
405	Between SR-126 & Rye Canyon	4M	8,000	3,200	.40	4,400	.55	2,981	.37	4,388	.55	-.03	.00
406	Between Rye Canyon & Magic Mtn	4M	8,000	3,200	.40	4,400	.55	2,981	.37	4,388	.55	-.03	.00
407	Between Magic Mtn & Valencia	4M	8,000	4,100	.51	5,200	.65	4,177	.52	5,189	.65	.01	.00
408	Between Valencia & McBean	4M	8,000	5,200	.65	6,000	.75	5,522	.69	6,360	.80	.04	.05

Segment		Lanes	Capacity	Existing Without Project				Existing With Project				Project Increment	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
409	Between McBean & Pico/ Lyons	4M	8,000	5,200	.65	6,300	.79	5,616	.70	6,664	.83	.05	.04
410	Between Pico/ Lyons & Calgrove	4M	8,000	5,100	.64	6,800	.85	5,460	.68	7,105	.89	.04	.04
411	Between Calgrove & SR-14	4M	8,000	5,100	.64	6,800	.85	5,428	.68	7,079	.88	.04	.03
412	South of SR-14	6M + 2T (6M + 1H + 2T)	14,400 (16,000)	6,700 (6,700)	.47 (.42)	13,500 (13,500)	.94 (.84)	6,950 (6,950)	.48 (.43)	13,739 (13,739)	.95 (.86)	.01 (.01)	.01 (.02)
Southbound													
401	North of Lake Hughes	4M	8,000	1,400	.18	1,800	.23	1,417	.18	1,835	.23	.00	.00
402	Between Lake Hughes & Parker	4M	8,000	1,700	.21	2,000	.25	1,740	.22	2,047	.26	.01	.01
403	Between Parker & Hasley Canyon	4M	8,000	2,200	.28	2,400	.30	2,200	.28	2,400	.30	.00	.00
404	Between Hasley Canyon & SR-126	4M	8,000	3,100	.39	3,000	.38	3,200	.40	3,062	.38	.01	.00
405	Between SR-126 & Rye Canyon	4M	8,000	3,500	.44	4,200	.53	3,493	.44	4,134	.52	.00	-.01

Segment		Lanes	Capacity	Existing Without Project				Existing With Project				Project Increment	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
406	Between Rye Canyon & Magic Mtn	4M	8,000	4,400	.55	5,400	.68	4,395	.55	5,345	.67	.00	-.01
407	Between Magic Mtn & Valencia	4M	8,000	4,600	.58	5,600	.70	4,641	.58	5,549	.69	.00	-.01
408	Between Valencia & McBean	4M	8,000	5,600	.70	6,400	.80	5,977	.75	6,935	.87	.05	.07
409	Between McBean & Pico/Lyons	4M	8,000	6,200	.78	6,700	.84	6,577	.82	7,217	.90	.04	.06
410	Between Pico/Lyons & Calgrove	4M	8,000	6,700	.84	6,500	.81	7,011	.88	6,922	.87	.04	.06
411	Between Calgrove & SR-14	4M*	6,400	6,900	1.08	6,500	1.02	7,184	1.12	6,891	1.08	**.04**	**.06**
412	South of SR-14	5M + 2T (6M + 1H + 2T)	12,400 (16,000)	13,900 (13,900)	1.12 (.87)	9,300 (9,300)	.75 (.58)	14,157 (14,157)	1.14 (.88)	9,560 (9,560)	.77 (.60)	**.02** (.01)	.02 (.02)

M = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
M = Mixed-Flow Lane on an Extended Uphill Grade, Without a Truck Lane (Capacity = 1,600 vehicles per hour)*
T = Truck Lane (Capacity = 1,200 vehicles per hour)
H = HOV Lane (Capacity = 1,600 vehicles per hour)
() = Currently under construction
***Bold** = Significant impact*
Capacities derived from PeMS data and through discussions with Caltrans staff.

In comparison to the Existing plus Project scenario, the Project Buildout Year 2021 Cumulative Conditions scenario presented above depicts the 2021 project buildout scenario and includes both the I-5/SR-14 HOV Direct Connector Project and the I-5 Improvement Project in place and, on that basis, determined that the proposed project would not result in significant impacts to the I-5 freeway mainline.

As noted above, the I-5/SR-14 Direct HOV Connector project is approximately 60 percent complete at this time and is anticipated to be completed in Fall 2012. (**Final EIR, Appendix F4.5**, I-5/SR-14 Direct HOV Connector Project Status.) However, the analysis presented here assumes the improvement is not in place and, therefore, under the Existing plus Project scenario, the proposed project would result in significant impacts on I-5 south of the SR-14 interchange south to the junction with I-210. With completion of the Direct HOV Connector project, there would be no significant impacts south of the SR-14 interchange, i.e., freeway segment number 412 would not be significantly impacted. (See **Table 4.5-18E** above, Segment 412, (numbers in parentheticals depict conditions with improvement in place).

As to the segment of I-5 between Calgrove and SR-14, the improvement recommended to mitigate the identified impact is the addition of one truck lane in the southbound direction. This improvement will be constructed as part of the first phase of construction of the I-5 Improvement Project discussed above; the Early Implementation Project, which will include construction of a truck lane in the southbound direction from Pico/Lyons to the SR-14, is scheduled to be completed in July 2013. (See footnote 17, supra.) **Table 4.5-18F, Freeway Volumes and V/C Ratios – Existing Plus Project Plus Mitigation Conditions**, summarizes the resulting V/C with the mitigation in place. The project applicant will pay to Caltrans the Mission Village project's pro-rata share of the costs to implement the I-5 Improvement Project. See Section 11, Cumulative Mitigation Measures, MV 4.5-29.

Table 4.5-18F
Freeway Volumes and V/C Ratios – Existing + Project + Mitigation Conditions

Segment		Lanes	Capacity	Existing Without Project				Existing With Project				Project Increment	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
Southbound													
411.	Between Calgrove & SR-14	4M + 1T	9,200	6,900	1.08	6,500	1.02	7,184	.78	6,891	.75	-.30	-.27

M = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.

f. Congestion Management Program (CMP) Analysis

As noted above, the CMP is a state-mandated program enacted by the state legislature with the passage of various Assembly Bills. The requirements for the program became effective with voter approval of Proposition 111 in June 1990. The Los Angeles County CMP requires that a proposed development project address two subject area with respect to traffic impacts—the project's impacts on the CMP highway system and the project's impacts on the local and regional transit system. Each is addressed separately below.

(1) Highways

The CMP highway network consists of all state highways (both freeways and arterials) and principal arterials that meet the criteria established by the Metro. Impacts are evaluated by monitoring LOS performance standards for specific highway segments and key roadway intersections on the CMP highway network, as designated by the Metro.

According to the CMP guidelines, the geographical area examined in a CMP traffic impact analysis consists of the CMP monitoring locations that meet the following criteria:

1. CMP intersections where the proposed project would add 50 or more trips during the AM or PM weekday peak hours (of adjacent street traffic); and/or
2. Mainline freeway locations where the project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

(a) CMP Intersections

The CMP intersections nearest to the project site are the intersection of Chiquito Canyon Road/SR-126 and the Valencia Boulevard/Magic Mountain Parkway intersection. The number of trips to and from the proposed project is forecast to include more than 50 peak hour trips at each of these intersections; 201 peak hour trips for Chiquito Canyon Road/SR-126 and 174 peak hour trips for Valencia Boulevard/Magic Mountain Parkway. The next closest CMP intersection is the intersection of Railroad Avenue (formerly San Fernando Road) and Lyons Avenue, and the maximum number of project trips at that location would be less than 50 during the peak hour (approximately 6 peak hour trips).

The impact analyses presented above show how the proposed project alone does not result in a significant impact at either CMP intersection location; however, under cumulative conditions each intersection requires mitigation to operate at an acceptable CMP level of service. As shown on **Table 4.5-21, ICU and LOS Summary – With Project Conditions with Mitigation**, the mitigation identified for each intersection would result in LOS D conditions at each location, which exceeds the CMP acceptable LOS E threshold.

(b) CMP Freeway Segments

The nearest mainline freeway CMP monitoring locations are the following:

- I-5 north of SR-126
- I-5 north of SR-14

The proposed project is forecast to add 150 or more peak hour trips to each of these locations and, as such, a CMP mainline freeway analysis is required. See **Appendix 4.5**, Traffic Impacts Analysis, Table 3-5. The next closest mainline freeway CMP monitoring location is the segment of I-5 north of Osborne Street in the San Fernando Valley. The maximum number of project trips at that location is less than 150 during the peak hour since the amount of project trips entering and leaving the Santa Clarita Valley is under that threshold. See **Appendix 4.5**, Traffic Impacts Analysis, Table 3-5.

As shown above in **Table 4.5-18,** analysis of the I-5 mainline freeway segments that meet the CMP criteria for analysis determined that the proposed project would not result in a significant impact at either of those locations.

(2) Project Transit Impacts

Another component of the CMP transportation impact analysis is a review of transit impacts. This review requires evidence that transit operators received the Notice of Preparation (provided in EIR **Appendix I**), an estimation of the number of project trips assigned to transit, information on facilities and/or programs that would encourage public transit use, and an analysis of project impacts on transit service. Information relevant to existing transit service in the project area was provided earlier in this EIR section.

Buildout of the Mission Village project is forecast to generate approximately 58,000 ADT. To estimate the number of project trips that would use public transit, the number of project ADT is multiplied by an occupancy factor (1.4) to determine total person trips, the resulting number is then multiplied by the applicable Metro factor (0.035) to determine the forecast number of transit trips that would be generated by the proposed project. As shown on **Table 4.5-19, Transit Trip Summary**, under the Standard Bus Route scenario, the proposed project would generate approximately 230 transit trips during the AM peak hour and 290 transit trips during the PM peak hour. Under the CMP Transit Corridor Scenario, which represents a scenario in which there would be more bus routes and shorter headways, the proposed project would generate approximately 400 transit trips during the AM peak hour and 500 transit trips during the PM peak hour

Table 4.5-19
Transit Trip Summary

	Standard Bus Route Scenario		CMP Transit Corridor Scenario1	
	AM Peak Hour	**PM Peak Hour**	**AM Peak Hour**	**PM Peak Hour**
Residential Vehicle Trips	2,245	2,857	2,245	2,857
Residential Person Trips[2]	3,143	4,000	3,143	4,000
Factor to Transit Trips	3.5%	3.5%	5%	5%
Sub-Total - Residential Transit Trips	110	140	157	200
Commercial Vehicle Trips	2,406	2,916	2,406	2,916
Commercial Person Trips[2]	3,368	4,082	3,368	4,082
Factor to Person Trips	3.5%	3.5%	7%	7%
Sub-Total – Commercial Transit Trips	118	143	236	286
Total Transit Trips	**228**	**283**	**393**	**486**

[1] *"Transit Corridor" consists of a series of transit nodes where frequent transit activity occurs. A transit node is defined as the intersection of two bus lines or fixed route shuttles, each with evening peak hour headways of 10 minutes or less.*

[2] *Person Trips = Vehicle Trips x 1.4*

Sources: Congestion Management Program for Los Angeles County, 2002 and 2004.

The City of Santa Clarita *Transportation Development Plan 2006–2015* (November 2006) (TDP) includes recommendations for short-term and medium term (5 to 10 years in future) transit service expansion in the Santa Clarita Valley. Specific to the vicinity of the Mission Village project, the TDP recommends the following medium-term bus route modifications as development proceeds and new road linkages are available:

> *Routes 3/7: As further development occurs, these routes should be extended further west on Magic Mountain Parkway and Valencia Boulevard. Portions could be converted to hybrid [combination fixed route/flexible route] service.*
>
> *Route 11: This potential hybrid route would serve the Newhall Ranch Landmark Village along Henry Mayo Drive, connecting to the MTS via Commerce Center Drive and Magic Mountain Parkway. [Route 11 would travel north on the Commerce Center Drive extension through the Mission Village project site and intersect with Henry Mayo Drive at SR-126.]*

With respect to funding, the TDP notes "if there are no significant changes in present formulas, it appears that SCT will maintain sufficient financial capacity to fund the recommended service expansion, subject to keeping escalation in operating expenses under tight control. If service expansion increases the budget faster than available revenues, the service expansion implementation can be delayed by a year or two." (TDP Executive Summary.)

The County does not have LOS standards for transit service that are applicable to future development, such as the proposed project; however, the potential demand for transit service that would result from the Mission Village project has the potential to result in a significant impact to transit services. As previously noted, in accordance with Specific Plan approval, the project includes a 1.2-acre site for a bus transfer station, which would facilitate the use of public transit for those who live or work at the project site. Additionally, the project applicant is working with City of Santa Clarita Transit to provide bus service to the project site.

Transit service is evaluated and funded on an as-needed basis. Coordination with the transit provider to identify appropriate bus stops (three proposed for Mission Village) and the payment of transit mitigation fees (adopted by SCT, Metro), as appropriate, would reduce the potential for transit-related impacts to a less than significant level. In this regard, to ensure that adequate transit capacity to serve the proposed project is available in the future, mitigation is proposed that requires the project applicant to pay applicable transit mitigation fees at the time of building permit issuance, unless the payment of such fees is modified by a transit mitigation agreement.

Metrolink, which is operated by the Southern California Regional Rail Authority (SCRAA), provides commuter rail service between the Antelope Valley and Downtown Los Angeles, and also links Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego counties with transfer service between the bus and rail systems. The closest Metrolink station to the project site (approximately 4.5 miles east) is located along Soledad Canyon Road east of Bouquet Canyon Road. Long-range plans as yet unspecified include an eventual Metrolink extension along the SR-126 corridor; land within Newhall Ranch is set aside for the Metrolink right-of-way, and a park-and-ride and/or train station.

With respect to bicycle and pedestrian facilities, the project has been designed for pedestrian connectivity and includes facilities for walking and bicycle use. The proposed project includes approximately 18,900 linear feet of community trails, 12,400 linear feet of local trails, and 9,200 linear feet of pathways. Community trails are unified pedestrian and bicycle routes (i.e., multi-use) in landscaped parkways, and are located along major roads in order to connect the Villages of the Specific Plan. A local trail is a multi-use route that may or may not follow a roadway; it provides access to amenities, the community trail network, or serves to link the Specific Plan Villages. Pathways consist of multi-purpose trails located adjacent to local collector roadways and provide a means of access between residential neighborhoods and parks, recreation centers, the school, and mixed-use commercial areas. In addition to these pedestrian/bicycle facilities, the project includes the installation of Class 2 bicycle lanes on portions of Magic Mountain Parkway and Commerce Center Drive extensions. For additional information regarding the pedestrian and bicycle facilities that would be provided as part of the project, please see EIR **Section 4.14**, **Parks and Recreation**.

In addition to the range of pedestrian and bicycle facilities that would be provided as part of the project, the proposed project would not conflict with the Metro Bicycle Transportation Strategic Plan to promote links between bicycle facilities and the transit network, including completion of the identified gaps in the inter-jurisdictional bikeway network.

g. On-Site Circulation Impacts

(1) On-Site Traffic Forecast

To derive traffic volume forecasts for the roadways within the project site, a focused traffic model was developed. Referred to as the Mission Village Traffic Model (MVTM), the model was developed to estimate traffic volume forecasts for roadways within the project site. The model was developed with the capability to derive detailed peak hour turning movement volumes at each of the on-site intersections. Forecast ADT volumes for buildout conditions (including Newhall Ranch plus other cumulative developments) within the project site and are provided in **Figure 4.5-12, ADT Volumes, Newhall Ranch Buildout Conditions – On-Site**.

As previously noted, the SCVCTM was used to calculate the general distribution of trips to and from the project site. From these overall distribution patterns, the MVTM was developed to provide an additional level of detail not possible with the SCVCTM. **Figure 4.5-13, Intersection Location Map – On-Site**, illustrates the intersection locations that were analyzed for peak hour volumes. Forecast traffic volumes for buildout conditions, including buildout of the entire Newhall Ranch Specific Plan, are illustrated in **Figure 4.5-14, AM Peak Hour Volumes, Newhall Ranch Buildout and Other Cumulative Development Buildout Conditions– On-Site**, for the AM peak hour and in **Figure 4.5-15, PM Peak Hour Volumes, Newhall Ranch Buildout And Other Cumulative Development Buildout Conditions – On-Site**, for the PM peak hour.

The peak hour traffic volumes referenced above were utilized to derive intersection lane configurations for the on-site intersections. An intersection capacity analysis based on these lanes and the forecast peak hour volumes is summarized in **Table 4.5-20, ICU and LOS Summary – On-Site Intersections**. As shown, each intersection of local and/or private street roadways is anticipated to operate at LOS C or better under buildout conditions. Two intersections along Magic Mountain Parkway, KK Drive/HH Street at Magic Mountain Parkway and Westridge Parkway at Magic Mountain Parkway, are forecast to operate at LOS D during the PM peak hour and LOS C during the AM peak hour. Detailed ICU calculation worksheets for each intersection are provided in Appendix B of the AFA Traffic Impacts Analysis in **Appendix 4.5** of the EIR.

Table 4.5-20
ICU and LOS Summary – On-Site Intersections

Intersection		Peak Hour			
		AM		PM	
		ICU	LOS	ICU	LOS
1.	B St/C St	0.16	A	0.18	A
2.	B St/Magic Mtn Pkwy	0.56	A	0.61	B
3.	A St/Magic Mtn Pkwy	0.62	B	0.66	B
4.	A St/B St	0.29	A	0.29	A
5.	A St/C St	0.19	A	0.19	A
6.	Q1 St/A St	0.25	A	0.24	A
7.	R St/A St	0.50	A	0.49	A
8.	EE Dr/A St	0.51	A	0.44	A
9.	Commerce Center Drive/A St	0.60	A	0.60	A
10.	KK/HH Dr/Magic Mtn Pkwy	0.72	C	0.82	D
11.	II Dr/Magic Mtn Pkwy	0.65	B	0.72	C
12.	Westridge Pkwy/Magic Mtn Pkwy	0.71	C	0.89	D
13.	Commerce Center Drive/Magic Mtn Pkwy	0.73	C	0.69	B
14.	Westridge Pkwy/OO Dr	0.34	A	0.42	A
15.	Commerce Center Drive/DD Dr	0.44	A	0.59	A
16.	Commerce Center Drive/FF Dr	0.37	A	0.55	A
17.	Commerce Center Drive/GG St	0.60	A	0.52	A
18.	EE Dr/II Dr	0.13	A	0.13	A
19.	EE Dr/DD Dr	0.28	A	0.37	A
20.	EE Dr/FF Dr	0.50	A	0.49	A
21.	Westridge Pkwy/QQ St	0.40	A	0.43	A
22.	Westridge Pkwy/RR St	0.36	A	0.42	A
23.	Westridge Pkwy/Entrada	0.35	A	0.39	A
24.	II Dr/DD Dr	0.14	A	0.17	A
25.	II Dr/CC Dr	0.13	A	0.18	A
26.	HH St/Driveway	0.36	A	0.33	A
27.	HH St/DD Dr	0.29	A	0.28	A
28.	HH St/CC Dr	0.34	A	0.38	A
29.	KK Dr/LL St	0.15	A	0.14	A
30.	KK Dr/LL2 Dr	0.15	A	0.14	A
31.	K St/B St	0.14	A	0.16	A

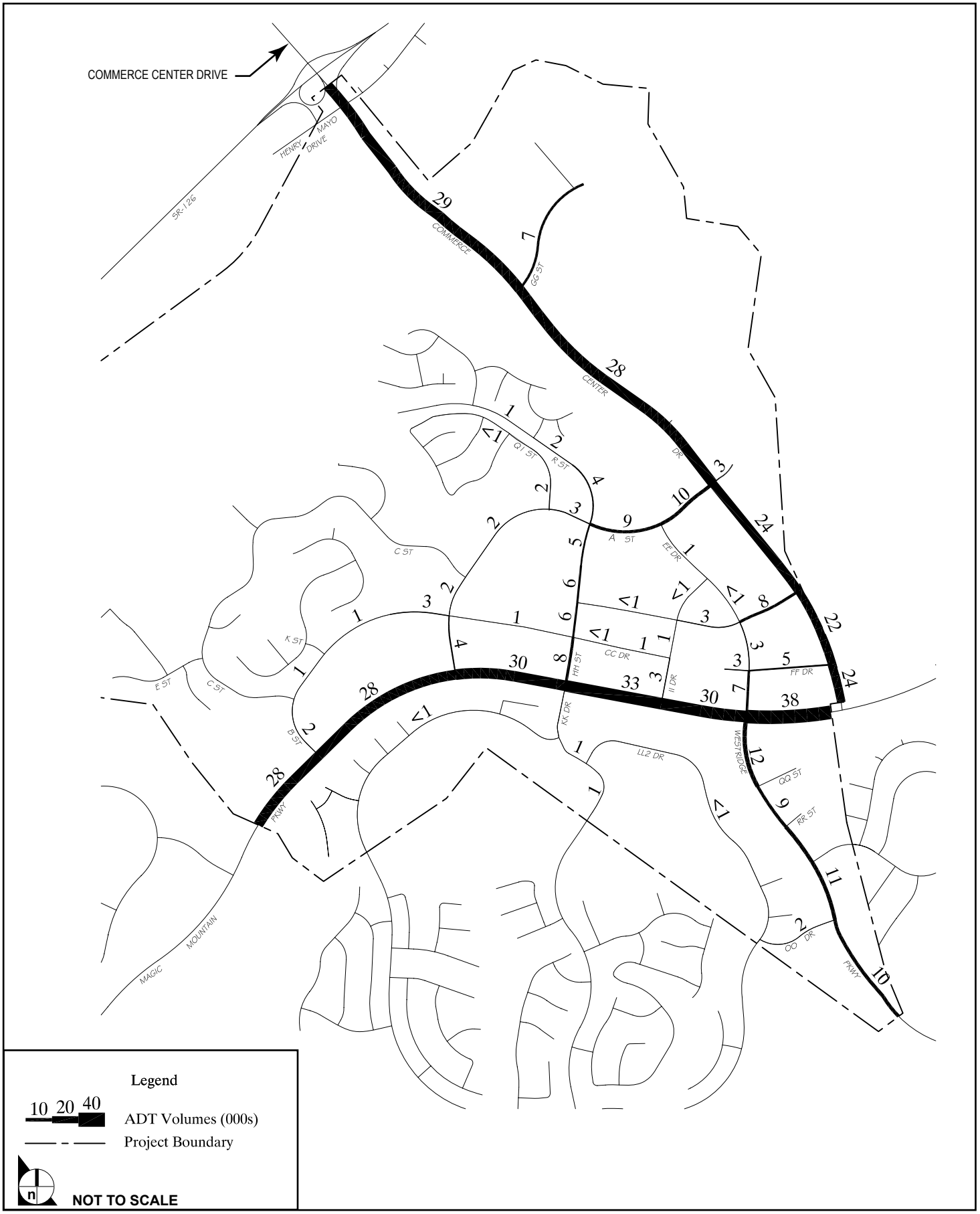
Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

*Source: Austin-Foust Associates, Inc., Mission Village Traffic Impact Analysis, October 2010 (**Appendix 4.5**).*

Each on-site intersection also was evaluated regarding the need for traffic signals based on peak hour traffic signal warrants. Details of the warrants analysis are provided in Appendix I to the AFA Traffic Impacts Analysis, which is included in **Appendix 4.5** of this EIR. Based on the warrants analysis, the following intersections are anticipated to meet the peak hour warrants when the Newhall Ranch Specific Plan area is fully built out:

2. B Street and Magic Mountain Parkway
3. A Street and Magic Mountain Parkway
9. Commerce Center Drive and A Street
10. KK Drive/HH Street and Magic Mountain Parkway
11. II Drive and Magic Mountain Parkway
12. Westridge Parkway and Magic Mountain Parkway
13. Commerce Center Drive and Magic Mountain Parkway
15. Commerce Center Drive and DD Drive
17. Commerce Center Drive and GG Street
21. Westridge Parkway and QQ Street (fire station signal)

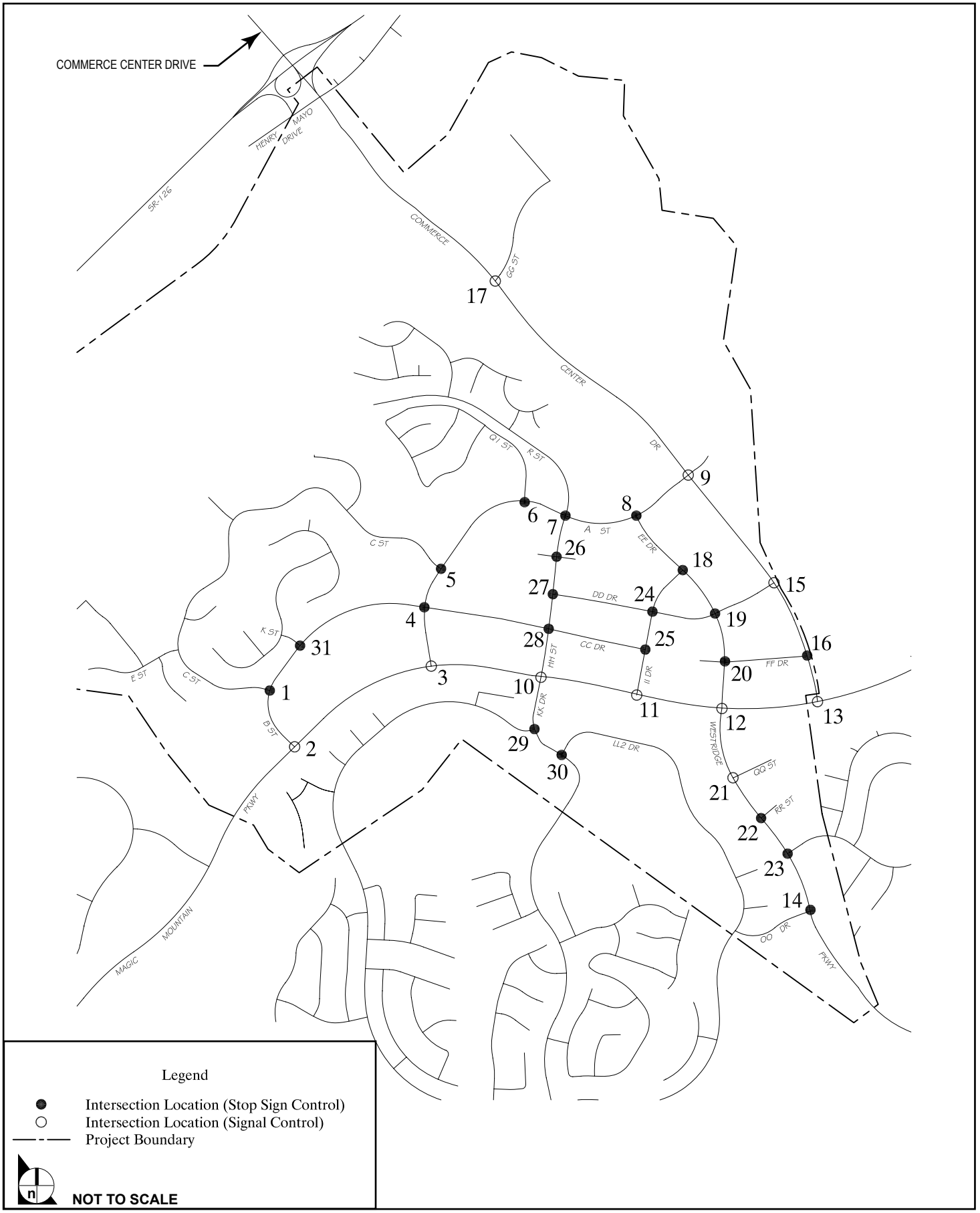
In addition, the County has determined that a traffic signal will be necessary at the Westridge Parkway at Old Rock Road/Boulder Crest Drive intersection due to the proximity of the existing elementary school.



SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-12**

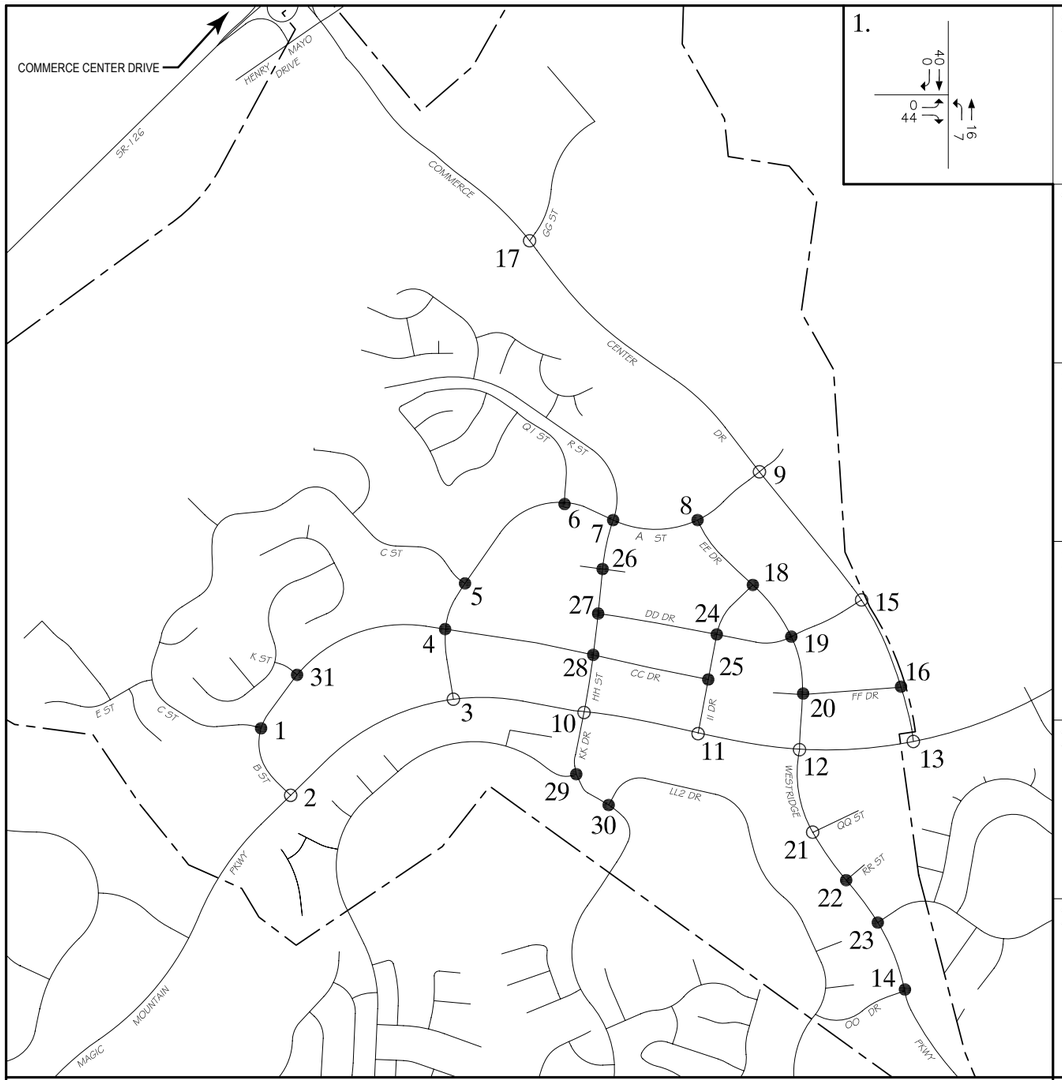
ADT Volumes, Newhall Ranch Buildout Conditions – On-Site



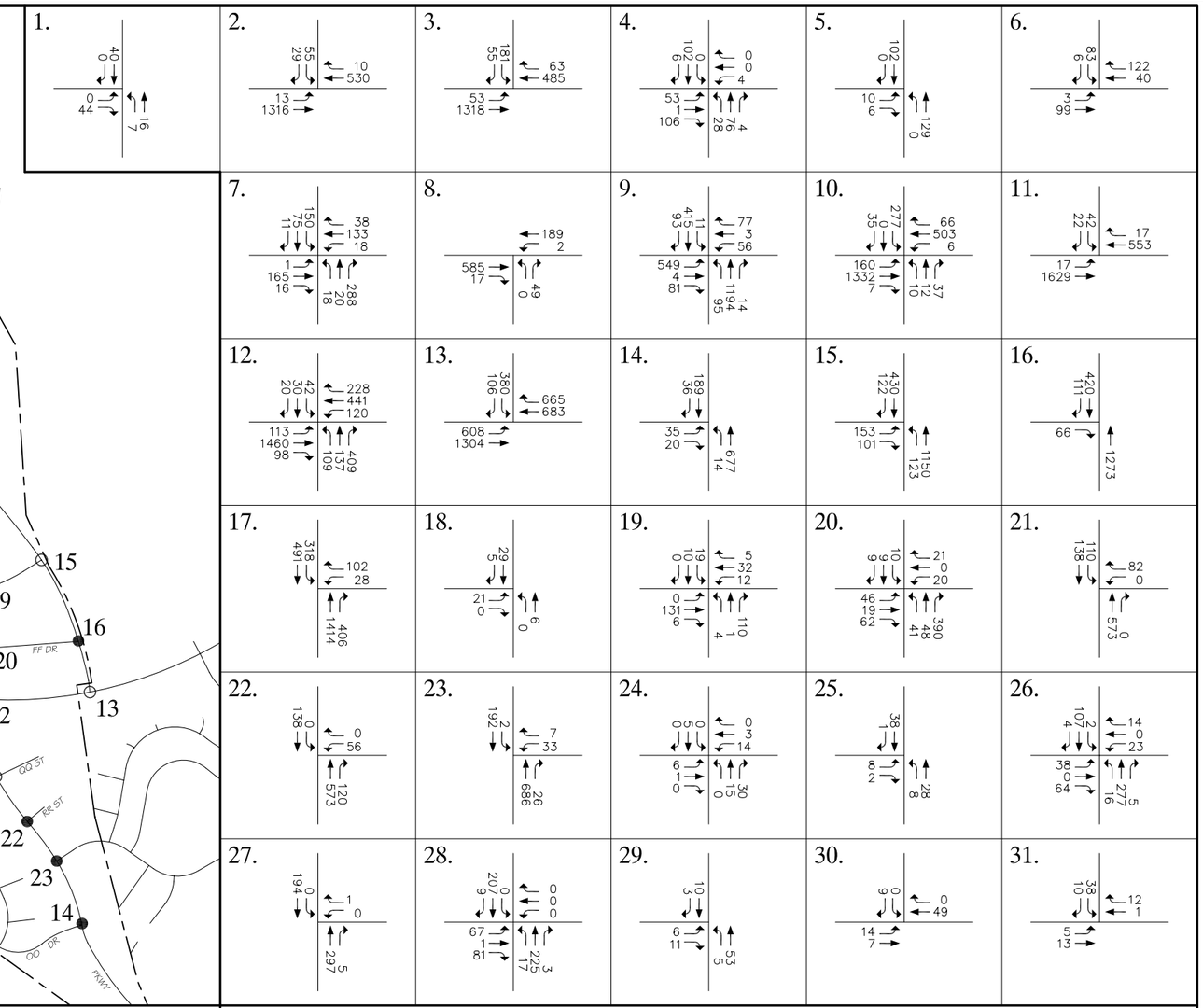
SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-13**

Intersection Location Map – On-Site



INTERSECTION LOCATIONS



INTERSECTION VOLUMES - AM PEAK HOUR

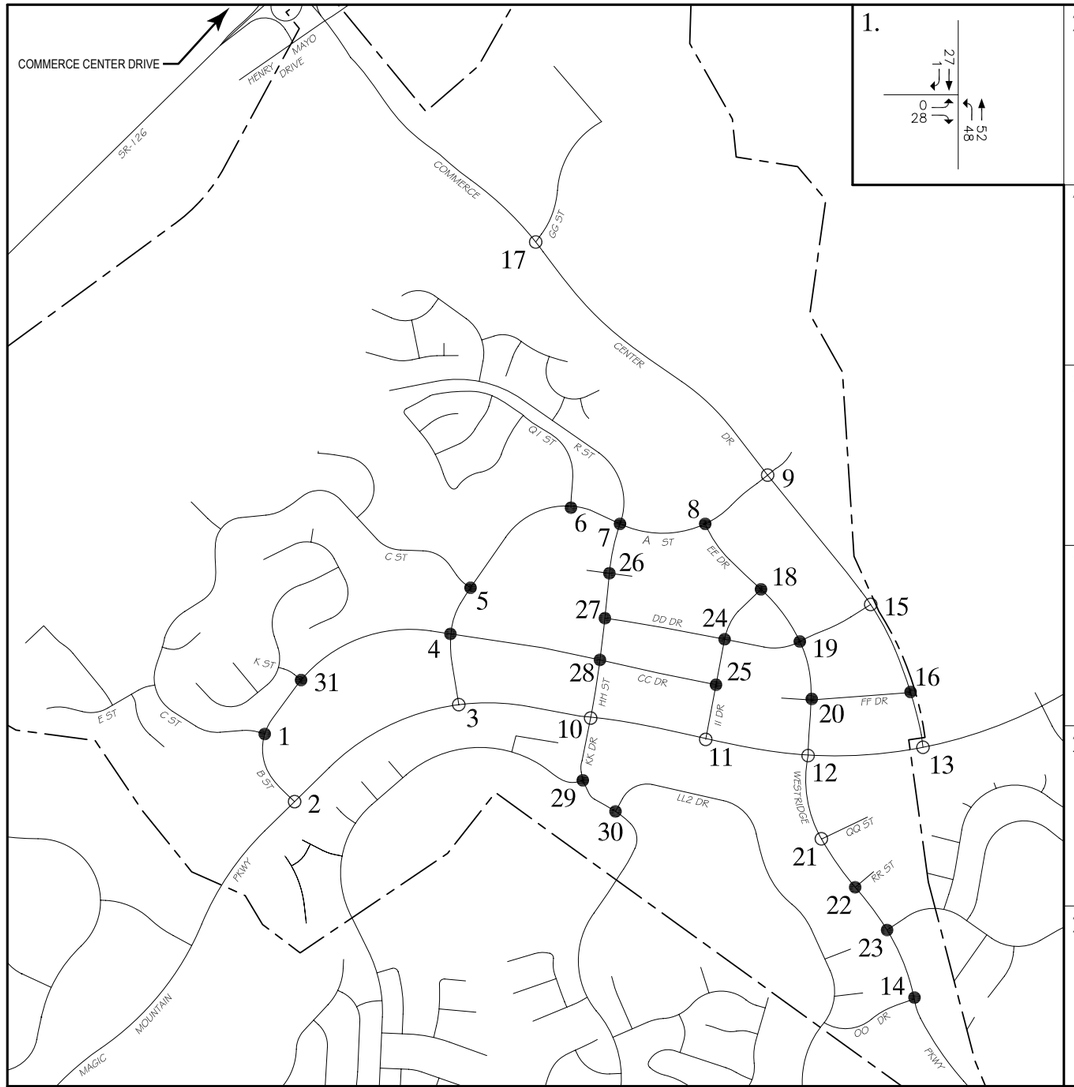
Legend
- Intersection Location (Stop Sign Control)
- Intersection Location (Signal Control)
- Project Boundary
- XX Intersection Volume

NOT TO SCALE

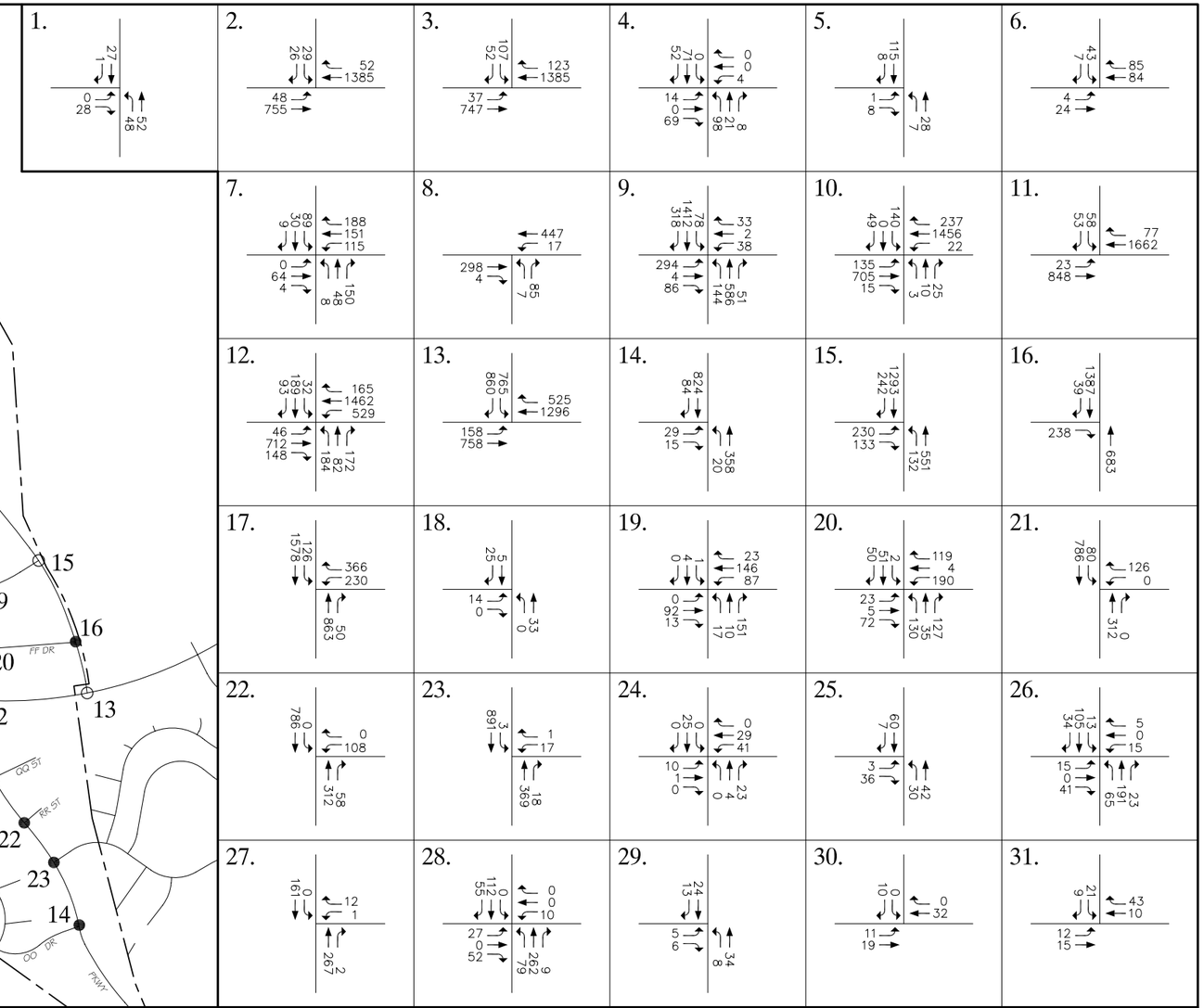
SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-14**

AM Peak Hour Volumes, Newhall Ranch and Other Cumulative Development Buildout Conditions – On-Site



INTERSECTION LOCATIONS



INTERSECTION VOLUMES - PM PEAK HOUR

Legend
- Intersection Location (Stop Sign Control)
- Intersection Location (Signal Control)
- Project Boundary
- XX Intersection Volume

NOT TO SCALE

SOURCE: Austin Foust Associates, Inc. – August 2010

FIGURE **4.5-15**

PM Peak Hour Volumes, Newhall Ranch and Other Cumulative Development Buildout Conditions – On-Site

9. MITIGATION MEASURES

Although the proposed Mission Village project may result in potential traffic/access impacts absent mitigation, the County previously imposed mitigation measures as part of the Newhall Ranch Specific Plan. These mitigation measures, as they relate to traffic/access, are found in the previously certified Newhall Ranch Specific Plan Program EIR and the adopted Mitigation Monitoring Plan for the Specific Plan (May 2003). In addition, this EIR identifies recommended mitigation measures specific to the Mission Village project site. The project applicant has committed to implementing the applicable mitigation measures from the Newhall Ranch Specific Plan. The applicant will implement the mitigation measures recommended for the proposed Mission Village project to ensure that adequate traffic capacity exists to accommodate build out of the Specific Plan, and that future development of the project site would not adversely affect adjacent properties.

a. Mitigation Measures Required by the Adopted Newhall Ranch Specific Plan, as they Relate to the Mission Village Project

The following mitigation measures (**Mitigation Measures SP 4.8-1** through **SP 4.8-13**, below) were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan (May 2003). The applicable mitigation measures will be implemented to mitigate the potentially significant traffic/access impacts associated with the proposed Mission Village project These measures are preceded by "SP," which stands for Specific Plan.

(1) On-Site Mitigation

SP 4.8-1 The applicants for future subdivision maps which permit construction shall be responsible for funding and constructing all on-site traffic improvements except as otherwise provided below. The obligation to construct improvements shall not preclude the applicant's ability to seek local, state, or federal funding for these facilities. *[All on-site traffic improvements included as part of the Mission Village project will be funded and/or constructed by the project applicant.]*

SP 4.8-2 Prior to the approval of each subdivision map which permits construction, the applicant for that map shall prepare a transportation performance evaluation which shall indicate the specific improvements for all on-site roadways which are necessary to provide adequate roadway and intersection capacity as well as adequate right-of-way for the subdivision and other expected traffic. Transportation performance evaluations shall be approved by Los Angeles County Department of Public Works according to standards and policies in effect at that time. The transportation performance evaluation shall form the basis for specific conditions of approval for the subdivision. *[This EIR, **Section 4.5**, provides the required transportation performance evaluation and, in combination with **Project Description, Section 1.0**, indicates the on-site roadway improvements necessary to provide adequate capacity.]*

SP 4.8-3 The applicants for future subdivisions shall provide the traffic signals at the 15 locations labeled B through P in Figure 4.8-17 [of the Newhall Ranch Specific Plan Final EIR] as well as any additional signals warranted by future subdivision design. Signal warrants shall be prepared as part of the transportation performance evaluations noted in Mitigation Measure 4.8-2 [of the Newhall Ranch Specific Plan Final EIR]**.** *[Ten (10) of the intersections located within the Mission Village site will be signalized intersections, including the three intersections depicted as signalized by Specific Plan Figure 4.8-17: Commerce Center Drive and "A" Street, Commerce Center Drive and Magic Mountain Parkway, and Magic Mountain Parkway and "A" Street. This EIR,* ***Section 4.5****, in combination with the traffic analysis presented in EIR* ***Appendix 4.5****, provides the required signal warrants.]*

SP 4.8-4 All development within the Specific Plan shall conform to the requirements of the Los Angeles County Transportation Demand Management (TDM) Ordinance. *[The Mission Village project would conform to the County's TDM Ordinance.]*

SP 4.8-5 The applicants for all future subdivision maps which permit construction shall consult with the local transit provider regarding the need for, and locations of, bus pull-ins on highways within the Specific Plan area. All bus pull-in locations shall be approved by the Department of Public Works, and approved bus pull-ins shall be constructed by the applicant. *[Final locations of bus pull-ins will be coordinated with the local transit provider and the Department of Public Works, and constructed in conjunction with the project.]*

(2) Off-Site Arterials

SP 4.8-6 Prior to the recordation of the first subdivision map which permits construction, the applicant for that map shall prepare a transportation performance evaluation which shall determine the specific improvements needed to each off-site arterial and related costs in order to provide adequate roadway and intersection capacity for the expected Specific Plan and General Plan buildout traffic trips. The transportation performance evaluation shall be based on the Master Plan of Highways in effect at that time and shall be approved by the Los Angeles County Department of Public Works. The applicant shall be required to fund its fair share of improvements to these arterials, as stated on Table 4.8-18 [of the Newhall Ranch Specific Plan Final EIR]. The applicants' total funding obligation shall be equitably distributed over the housing units and non-residential building square footage (i.e., Business Park, Visitor-Serving, Mixed-Use, and Commercial) in the Specific Plan, and shall be a fee to be paid to the County and/or the City at each building permit. For off-site areas within the County unincorporated area, the applicant may construct improvements for credit against or in lieu of paying the fee. *[This mitigation measure may or may not be applicable depending upon approval of other Newhall Ranch Specific Plan subdivisions in process.]*

(3) I-5 and SR-126 in Los Angeles County

SP 4.8-7 Each future performance evaluation which shows that a future subdivision map will create significant impacts on SR-126 shall analyze the need for additional travel lanes on SR-126. If adequate lane capacity is not available at the time of subdivision, the applicant of the subdivision shall fund or construct the improvements necessary to serve the proposed increment of development. Construction or funding of any required facilities

shall not preclude the applicant's ability to seek state, federal, or local funding for these facilities. *[The future performance evaluation presented in this EIR, **Section 4.5**, determined that the Mission Village project would cause significant impacts at the Commerce Center Drive/SR-126 intersection at buildout, and that the project would be responsible for its fair-share of improvements to the intersections.]*

(4) Congestion Management Plan Mitigation

SP 4.8-8 Project-specific environmental analysis for future subdivision maps which allow construction shall comply with the requirements of the CMP in effect at the time that subdivision map is filed. *[The future performance evaluation presented in this EIR, **Section 4.5**, complies with the requirements of the Congestion Management Program presently in effect.]*

(a) SR-126 in Ventura County

SP 4.8-9 Prior to the recordation of the first subdivision map which permits construction, the applicant for that map shall prepare a transportation evaluation including all of the Specific Plan land uses which shall determine the specific improvements needed to the following intersections with SR-126 in the City of Fillmore and community of Piru in Ventura County: "A", "B", "C", "D", and "E" Streets, Old Telegraph, Olive, Central, Santa Clara, Mountain View, El Dorado Road, and Pole Creek (Fillmore), and Main/Torrey and Center (Piru). The related costs of those intersection improvements and the project's fair share shall be estimated based upon the expected Specific Plan traffic volumes. The transportation performance evaluation shall be based on the Los Angeles County Master Plan of Highways in effect at that time and shall be approved by the Los Angeles County Department of Public Works. The applicant's total funding obligation shall be equitably distributed over the housing units and non-residential building square footage (i.e., Business Park, Visitor Center, Mixed Use, and Commercial) in the Specific Plan, and shall be a fee to be paid to the City of Fillmore and the County of Ventura at each building permit. *[This mitigation measure may or may not be applicable depending upon approval of other Newhall Ranch Specific Plan subdivisions in process. The referenced transportation evaluation was prepared as part of the Landmark Village EIR (SCH No. 2004021002).]*

(5) Freeway/Highway Intersections and Interchanges

SP 4.8-10 The Specific Plan is responsible to construct or fund its fair-share of the intersections and interchange improvements indicated on Table 4.8-18 [of the Newhall Ranch Specific Plan Final EIR]. Each future transportation performance evaluation required by **Mitigation Measure SP 4.8-2** [of the Newhall Ranch Specific Plan Final EIR] which identifies a significant impact at these locations due to subdivision map-generated traffic shall address the need for additional capacity at each of these locations. If adequate capacity is not available at the time of subdivision map recordation, the performance evaluation shall determine the improvements necessary to carry Specific Plan generated traffic, as well as the fair share cost to construct such improvements. If the future subdivision is conditioned to construct a phase of improvements which results in an overpayment of the fair-share cost of the improvement, then an appropriate adjustment (offset) to the fees paid to Los Angeles County and/or City of Santa Clarita pursuant to **Mitigation Measure SP 4.8-6**, above, shall be made. *[The transportation performance evaluation presented in this*

*EIR, **Section 4.5**, fulfills the requirements of this Specific Plan mitigation measure relative to Mission Village.]*

SP-4.8-11 The applicant of the Newhall Ranch Specific Plan shall participate in an I-5 developer fee program, if adopted by the Board of Supervisors for the Santa Clarita Valley. *[The Board of Supervisors has not adopted a developer fee program for the Santa Clarita Valley. However, the applicant and ~~currently is in negotiations with~~ Caltrans have prepared ~~regarding~~ a funding agreement under which the applicant will pay to Caltrans the project's pro-rata share of the I-5 Improvement Project. See Final EIR, **Appendix F4.5.**].*

SP-4.8-12 The applicant of the Newhall Ranch Specific Plan shall participate in a transit fee program, if adopted for the entire Santa Clarita Valley by Los Angeles County and City of Santa Clarita. *[The applicant will be required to pay the applicable transit fees in place at the time of map recordation.]*

SP-4.8-13 Prior to the approval of each subdivision map which permits construction, the applicant for that map shall prepare a traffic analysis approved by the Los Angeles County Department of Public Works. The analysis will assess project and cumulative development (including an existing plus cumulative development scenario under the County's Traffic Impact Analysis Report Guidelines [TIA] and its Development Monitoring System [DMS]). In response to the traffic analysis, the applicant may construct off-site traffic improvements for credit against, or in lieu of paying, the mitigation fees described in **Mitigation Measure 4.8-6** [of the Newhall Ranch Specific Plan Final EIR]. If future subdivision maps are developed in phases, a traffic study for each phase of the subdivision map may be submitted to determine the improvements needed to be constructed with that phase of development. *[The traffic analysis presented in this **Section 4.5** fulfills the requirements of this Specific Plan mitigation measure.]*

b. Additional Mitigation Measures Proposed by this EIR

The following project-specific mitigation measures are recommended to mitigate the potentially significant traffic/access impacts that may occur with implementation of the Mission Village project. These mitigation measures, which shall be made conditions of approval, are in addition to those adopted in the certified Newhall Ranch Specific Plan Program EIR. To reflect that the measures relate specifically to the Mission Village project, each measure is preceded by "MV," which stands for Mission Village.

Mitigation is proposed relative to the significant impacts identified under the existing plus ambient plus project scenario, and under the 2021 project buildout cumulative scenario. (Mitigation relative to the significant impacts identified under a 2035 long-range cumulative scenario are set forth in Section 11, Cumulative Mitigation Measures, below.) As to the improvements proposed to mitigate the identified impacts under the existing plus ambient plus project condition, the project, along with other projects as appropriate, is responsible for the construction of these improvements and, consistent with County Department of Public Works policy, the improvements are to be implemented prior to occupancy of the project, unless otherwise indicated by an approved phasing analysis.

With respect to the 2021 project buildout cumulative mitigation, the project is responsible for its fair share of the recommended improvements, and the timing of these improvements shall be as determined by the *Westside Santa Clarita Valley Phasing Analysis for the City of Santa Clarita* (July 2006) and the *Westside Santa Clarita Valley Roadway Phasing Analysis* (November 2006), as updated (collectively, *Westside Roadway Phasing Analysis*). As discussed above, the *Westside Roadway Phasing Analysis* identifies the specific roadway and intersection improvements necessary to support Westside development. The cumulative mitigation measures identified below and in Section 11 are derived from the improvements identified in the phasing analysis and, consequently, represent a subset of the phasing analysis improvements. The phasing analysis considered the additional traffic associated with all Westside development, not just the proposed Mission Village project, and it apportions to each project its share of the identified improvements based on ADT volumes, not on the basis of significant impacts as is the case with the analysis presented in this section.

The *Westside Roadway Phasing Analysis* also identifies milestones based on residential unit counts and commercial square footages to specify when the improvements identified herein as mitigation should be in place. As such, the proposed project will be developed in accordance with these milestones and the corresponding specific improvements as identified in the most current County Department of Public Works-approved phasing analysis. The project applicant intends to document regularly the amount of Westside development that has occurred and that the required improvements have been constructed at the identified milestones. A copy of the *Westside Roadway Phasing Analysis* is included in EIR **Appendix 4.5**.

In the event the project fully constructs any of the mitigation improvements set forth below at its own cost, the project shall be entitled to a credit in an amount equal to the cost to construct the improvement, less the project's proportionate share. Additionally, once the B&T District is established that encompasses the area covered by the *Westside Roadway Phasing Analysis*, i.e., the Westside B&T District, the payment of B&T fees by the project shall be in lieu of any remaining proportionate share due for those improvements located within the boundaries of the newly formed district.

For those improvements identified below that are located within the Valencia or Via Princessa B&T District, no payment of mitigation or B&T District fees towards the improvements is required by the proposed project. The Mission Village project site is not located within the boundaries of either district, and the defined "area of benefit" for these districts, i.e., those properties identified as receiving benefit from the improvements funded by the respective district, does not include the project site. Therefore, payment of the B&T District fees is not required of the project. Moreover, the Valencia and Via Princessa B&T Districts are full mitigation districts, which means that the B&T fees paid by development within the districts (development east of I-5 or "Eastside Development"), combined with other funding sources (e.g.,

state and federal funds, gas and sales taxes, etc.), have been calculated to cover the full cost of all improvements necessary to construct the arterial network as described in the respective county and city general plan transportation elements. This network has been designed to accommodate both local and cumulative traffic from outside the B&T districts, including Mission Village. Therefore, the B&T district improvements, which include improvements identified as project mitigation below, will be fully funded and constructed through the respective district without Mission Village participation and, as a result, the corresponding significant impacts identified in this section will be fully mitigated and no further mitigation is necessary. (Please see EIR **Appendix 4.5** for copies of the Valencia B&T District Report Update [March 2008] and the Via Princessa Bridge and Major Thoroughfare Construction Fee District Update Report [March 2002].)

Additionally, as previously noted, the project applicant is in the process of forming a new B&T District, the Westside B&T District, which would encompass the Mission Village site, as well as other Westside development. By its participation in the new district, the project will be required to contribute funding towards construction of the planned Westside roadway infrastructure. As is the case with the Valencia and Via Princessa B&T Districts, the infrastructure to be constructed within the district will be based on approved general plan transportation elements and, accordingly, has been designed to accommodate both local traffic within the district and cumulative traffic from outside the district. In this manner, the Mission Village project will be required to fund its share of the improvements within the new district that are necessary to support both Westside and Eastside Development.

(1) Off-Site Mitigation

(a) Off-Site Mitigation Measures – Existing Plus Ambient Plus Project Conditions

MV 4.5-1 28. The Old Road & McBean Parkway – Consistent with the milestones established in the most current County Department of Public Works (DPW) approved Westside Roadway Phasing Analysis, the project applicant shall stripe a third southbound through lane and a westbound right-turn lane at the intersection. Detailed signing and striping plans and traffic signal plans shall be submitted to the County Department of Public Works for review and approval. (*The Mission Village project's fair-share responsibility for the improvements identified in this mitigation measure is 27% in the cumulative condition. This fair-share information is provided to facilitate any future action by the Project applicant to seek participatory funding from other development unrelated to the Mission Village project. Please refer to EIR* ***Appendix 4.5****, AFA Traffic Impact Analysis, Appendix J, for fair-share calculations.*)

MV 4.5-2 94. Commerce Center Drive & SR-126 – The project applicant shall reconstruct the existing intersection as a grade-separated interchange prior to issuance of building permits for the 2,780th residential unit and 935,000 square feet of non-residential commercial uses (or an equivalent traffic-generating combination thereof), or as otherwise provided in the most current County DPW approved Westside Roadway Phasing Analysis, whichever would require reconstruction of the intersection first.

Detailed signing and striping plans and traffic signal plans shall be submitted to the County Department of Public Works for review and approval. (*The Mission Village project's fair-share responsibility for the improvements identified in this mitigation measure is 44.8% in the cumulative condition. This fair-share information is provided to facilitate any future action by the Project applicant to seek participatory funding from other development unrelated to the Mission Village project. Please refer to EIR* ***Appendix 4.5****, AFA Traffic Impact Analysis, Appendix J, for fair-share calculations.*)

(b) Off-Site Mitigation Measures – 2021 Project Buildout Cumulative Conditions

MV 4.5-3 7. I-5 Southbound Ramps & SR-126 – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to stripe a fourth westbound through lane. (Project Share = 14.3 percent. Please refer to EIR **Appendix 4.5**, AFA Traffic Impact Analysis, Appendix J, for fair-share calculations.)

MV 4.5-4 12. I-5 Southbound Ramps & Valencia Boulevard – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to re-stripe the second westbound free-flow right-turn lane to a third westbound through lane/shared free-flow right-turn lane. (Project Share = 7.5 percent)

MV 4.5-5 25. The Old Road & Rye Canyon Road – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to: (i) add a second northbound through lane and a second southbound left-turn lane; and (ii) convert the northbound and westbound free-flow right-turn lanes to conventional right-turn lanes with overlap phasing. (Project Share = 7.1 percent)

28. The Old Road & McBean Parkway – The project's compliance with **mitigation MV 4.5-1** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

MV 4.5-6 45. McBean Parkway/Magic Mountain Parkway – The improvements recommended to mitigate the project's identified significant impacts at this intersection are to re-stripe for a third eastbound through lane and add a right-turn overlap phase for a westbound right-turn lane. These improvements are located within the Valencia B&T District and, therefore, it is expected the improvements will be constructed through the Valencia B&T District. However, as the intersection is within the jurisdiction of the City of Santa Clarita, at the request of the City, the project applicant will construct the identified improvement and, under such scenario, shall be entitled to reimbursement from the Valencia B&T District for the full cost of the improvement, should the improvement not be constructed by the time it is identified as necessary in the most current County DPW approved Westside Roadway Phasing Analysis.~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-7 48. McBean Parkway/Newhall Ranch Road – The improvements recommended to mitigate the project's identified significant impacts at this intersection are: (i) Re-stripe for a fourth westbound through lane; and (ii) ~~Reconstruct~~ Re-stripe the northbound approach to provide dual right-turn lanes in conjunction with appropriate pedestrian safety enhancements ~~remove the pork chop island and reconfigure as conventional dual right-turn lanes~~. These improvements are located within the Valencia B&T District and, therefore, it is expected the improvements will be constructed through the Valencia B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (7%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis.~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-8 55. Orchard Village & McBean Parkway – The improvements recommended to mitigate the project's identified significant impacts at this intersection are: (i) add a separate southbound left-turn lane; (ii) add a separate southbound through lane; (iii) add a separate southbound right-turn lane; and (iv) reconfigure the existing southbound right-turn lane as a shared left-turn through lane, as identified in the mitigation for the Henry Mayo Newhall Memorial Hospital expansion project. These improvements are located within the Valencia B&T District and, therefore, it is expected the improvements will be constructed through the Valencia B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the project applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (3%) and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~ (Note: In the event the above improvements are implemented as part of the Henry Mayo Newhall Memorial Hospital expansion project, Mission Village would no longer result in significant impacts at this intersection and no mitigation would be necessary.)

MV 4.5-9 66. Bouquet Canyon Road & Newhall Ranch Road – The improvement recommended to mitigate the project's identified significant impacts at this intersection is to reconfigure the second eastbound right-turn lane to a shared through/right-turn-lane ~~stripe a third eastbound through lane while maintaining three eastbound left-turn lanes and two eastbound right-turn lanes~~. This improvement is located within the Valencia B&T District and, therefore, it is expected the improvement will be constructed through the Valencia B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the

potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (4%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis.~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

94. Commerce Center Drive & SR-126 – The project's compliance with **Mitigation MV 4.5-2** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

(c) Other Mitigation Measures

MV 4.5-1~~0~~6 Applicable transit mitigation fees shall be paid by the project applicant at the time of building permit issuance, unless modified by an approved transit mitigation agreement.

MV 4.5-11~~7~~ Prior to the commencement of project construction activities, the project applicant shall institute construction traffic management controls in accordance with the California Department of Transportation (Caltrans) traffic manual. These traffic management controls shall include measures determined on the basis of site-specific conditions including, as appropriate, the use of construction signs (e.g., "Construction Ahead") and delineators, and private driveway and cross-street closures.

MV 4.5-12~~8~~ Traffic signals shall be installed at the following intersections within the project site. The design and construction of the traffic signals shall be the sole responsibility of the project. The signals shall be in place to the satisfaction of the County Department of Public Works. Detailed signing and striping plans and traffic signal plans shall be submitted to Public Works for review and approval:

- B Street at Magic Mountain Parkway;
- A Street at Magic Mountain Parkway;
- Commerce Center Drive at A Street;
- KK Drive/HH Street at Magic Mountain Parkway;
- II Drive at Magic Mountain Parkway;
- Westridge Parkway at Magic Mountain Parkway;
- Commerce Center Drive at Magic Mountain Parkway;
- Commerce Center Drive at DD Drive;
- Commerce Center Drive at GG Street; and
- Westridge Parkway at QQ Street (Fire Station Signal).

MV 4.5-13~~9~~ The project applicant, or the current owner of the development, shall monitor the following intersections for the installation of traffic signals once the Mission Village elementary school is opened and every year thereafter for up to five years after the certificate of occupancy of the last residential unit of Mission Village (excluding age restricted/qualified residential units and residential units within the Saugus School District) is issued and the full planned occupancy of 900 students for the school is reached (or fewer students if official documentation from the Newhall School District shows no increase in student enrollment for five consecutive school years):

- A Street at B Street/CC Drive;
- Q1 Street at A Street; and
- HH Street/R Street at A Street.

The referenced monitoring shall include the submittal of annual traffic signal warrant analyses to the County Department of Public Works for review and approval. At the time, if any, traffic signals are warranted, the applicant shall enter into a secured agreement/bond with Public Works to guarantee the installation of traffic signals, design the necessary striping and signal plans, and construct the signals to the satisfaction of Public Works. Any security for the traffic signal construction submitted will be returned once the construction is completed to the satisfaction of Public Works or at the expiration of the referenced monitoring program.

MV 4.5-14~~0~~ The project shall install a traffic signal at the following location after detailed signing and striping plans and traffic signal plans have been reviewed and approved by the County Department of Public Works:

- Westridge Parkway at Old Rock Road.

MV 4.5-15~~1~~ Prior to recordation of the first tract map in Mission Village, a revised Westside Roadway Phasing Analysis (RPA), prepared and submitted by the project applicant, shall be reviewed and approved by the County Department of Public Works (DPW). This RPA shall update the previously approved RPA and identify the necessary improvements and residential unit thresholds (timing requirements) for those improvements for Mission Village based on then-current phasing assumptions. The revised RPA shall include actual traffic counts on newly constructed roadways and/or at intersections where traffic mitigation measures have been carried out. Subsequent updates of the RPA shall be prepared based on the following development thresholds:

i) 3,176 residential units and 13.17 million square feet non-residential uses;

ii) 6,066 residential units and 14.87 million square feet non-residential uses;

iii) 14,515 residential units and 16.00 million square feet non-residential uses;

iv) 21,373 residential units and 17.65 million square feet non-residential uses;

v) 25,001 residential units and 19.78 million square feet non-residential uses; and

vi) 27,615 residential units and 22.08 million square feet non-residential uses.

In addition, the applicant shall submit to DPW for review and approval an annual report, due January 30th for the prior year, identifying the number and type of residential and commercial building permits issued for Mission Village (and any other development within the Westside Santa Clarita area). The purpose of this annual report will be to track development progress against the thresholds identified in the AFA Traffic Impact Analysis and the then-current RPA.

c. Post-Mitigation Level of Significance

Table 4.5-21, ICU and LOS Summary – With Project Conditions with Mitigation, depicts the level of service for each of the significantly impacted intersections, before and after implementation of the recommended mitigation measures. **Table 4.5-21** shows that, under project buildout conditions, implementation of the mitigation measures would fully mitigate the project's impacts.

Specific to the Commerce Center Drive/SR-126 intersection (Intersection 94), which is to be re-constructed as a grade-separated interchange, a project report for the interchange has been completed and as of this writing final design plans are being prepared. The interchange project will reconstruct the following three intersections: (1) Commerce Center Drive at Henry Mayo Drive (Intersection 81); (2) Commerce Center Drive at SR-126 Eastbound Ramps (Intersection 82); and (3) Commerce Center Drive at SR-126 Westbound Ramps (Intersection 83). Once the interchange project is completed, each of the three intersections will operate at LOS D or better under long-range buildout conditions that include the proposed Mission Village project. (See EIR **Appendix 4.5**, AFA Traffic Impacts Analysis, Appendix A.)

10. LONG-RANGE (2035) CUMULATIVE IMPACTS

a. Introduction

As discussed in detail in this EIR, **Section 3.0, Cumulative Impact Analysis Methodology,** Section 15130(b) of the *State CEQA Guidelines* allows two methods for identifying the future projects to be considered when assessing cumulative impacts. These two methods involve:

> *(a) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or*
>
> *(b) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified which described or evaluated regional or areawide conditions contributing to the cumulative impact.*

Table 4.5-21
ICU and LOS Summary - With Project Conditions with Mitigation

Intersection	Existing plus Ambient without Project				Existing plus Ambient plus Project with Mitigation				Change	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
28. The Old Road & McBean Pky	0.70	B	0.92	E	0.67	B	0.91	E	-0.03	-0.01
94. Commerce Center Dr. & SR-126	0.57	A	0.84	D	n/a	n/a	n/a	n/a	n/a	n/a
Intersection	**2021 Cumulative Conditions without Project**				**2021 Cumulative Conditions with Project with Mitigation**				**Change**	
	AM		**PM**		**AM**		**PM**			
	ICU	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**ICU**	**LOS**	**AM**	**PM**
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & SR-126	0.83	D	0.70	B	0.73	C	0.66	B	-0.10	-0.04
12. I-5 SB Ramps & Valencia	0.72	C	0.81	D	0.62	B	0.67	B	-0.10	-0.14
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.03	F	1.21	F	0.78	C	0.91	E	-0.25	-0.30
28. The Old Road & McBean Pky	0.53	A	0.85	D	0.54	A	0.86	D	0.01	0.01
City Arterial Intersections										
45. McBean Parkway & Magic Mountain Parkway	0.71	C	0.92	E	0.75	C	0.92	E	-0.04	-0.00
48. McBean Parkway & Newhall Ranch Road	0.78	C	1.01	F	0.70	B	0.81	D	-0.08	-0.20
55. Orchard Village & McBean Parkway	0.65	B	0.83	D	0.64	B	0.80	C	-0.01	-0.03
66. Bouquet Canyon Road & Newhall Ranch Road	0.89	D	1.01	F	0.83	D	0.88	D	-0.06	-0.13

Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

The impacts analysis presented above for the 2021 Project Buildout Cumulative Conditions scenario was based on the SCVCTM long-range model, which includes both specifically identified future development projects and a summary of projections based on the planned land uses designated in the County Area Plan and City General Plan update. As noted above, the 2021 scenario was derived based on an interpolation of the long-range 2035 buildout forecast for the Santa Clarita Valley, adjusted to 2021 conditions. The cumulative impacts analysis presented in this section is based on full valley buildout under 2035 conditions.

b. Long-Range 2035 Valley Buildout Conditions

The following provides an analysis of cumulative transportation impacts using a plans/projections approach. The Newhall Ranch Specific Plan Program EIR included a long-range cumulative impacts analysis, which entailed buildout of all lands under the current land use designations in the Los Angeles County Santa Clarita Valley Areawide Plan and the City of Santa Clarita General Plan, plus the proposed Specific Plan, plus all known active pending General Plan Amendment requests for additional urban development in the County unincorporated area of Santa Clarita Valley and the City of Santa Clarita. This section updates that information by presenting long-range cumulative traffic volume forecasts based on the current cumulative land use data for the Santa Clarita Valley.

As discussed above, future land development is anticipated for the Santa Clarita Valley as quantified in the SCVCTM. The SCVCTM includes a land use database prepared by Los Angeles County and the City of Santa Clarita that is based on the approved General Plans of each jurisdiction. This database is regularly updated as specific projects are proposed and thus is a comprehensive listing of cumulative projects. In addition, the land use database has also been updated based on the proposed One Valley One Vision plan.[18]

Table 4.5-22, Land Use and ADT Summary – 2035 Buildout Cumulative Conditions, summarizes the SCVCTM land use databases for the base year of the model and the Long-range Buildout/Cumulative horizon, which is referred to as 2035. From the land use summarized here, the SCVCTM calculates vehicle trip generation estimates for the Santa Clarita Valley.

As previously noted, where future development will occur but specific projects have not been developed, the SCVCTM Long-range Buildout/Cumulative database utilizes land use projections based on the allowable uses shown in the proposed One Valley One Vision County Area Plan/City General Plan update. Additionally, the trips forecast by the model are not limited to trips generated in the Santa Clarita Valley, but also include trips to and from the Valley, as well as through trips; thus, regional growth, which is traffic volume increases occurring outside of the SCVCTM area, is incorporated into the model.

18 Austin-Foust Associates, Inc., *One Valley One Vision Valley-Wide Traffic Study*, September 2009.

Table 4.5-22
Land Use and ADT Summary – 2035 Buildout Cumulative Conditions

Land Use Type	Units	Existing[1]		Long-Range General Plan/Cumulative (2035)[2]	
		Amount	ADT	Amount	ADT
Single Family Residential	du	48,300	471,200	81,500	796,400
Multi-Family Residential	du	24,400	191,000	67,000	504,400
Commercial Retail	msf	9,200	515,700	23,300	1,215,700
Commercial Office	msf	2,100	26,000	18,100	214,400
Industrial Park	msf	18,300	107,600	40,700	240,700
Hotel	Rooms	1,000	8,000	2,500	20,800
Elem/Middle School	Stu.	29,900	43,400	51,900	75,200
High School	Stu.	10,500	18,800	18,500	33,100
Other	--	--	106,300	--	174,100
TOTAL	--	--	1,488,000	--	3,274,800

Notes:
du = Dwelling Units
msf = Million Square Feet
Stu. = Students
Source: Santa Clarita Valley Consolidated Traffic Model
[1] *Most current information available at time of report preparation (2004 conditions).*
[2] *Proposed One Valley One Vision County Area Plan/City General Plan update*
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5***

(1) Year 2035 Cumulative Impacts on Arterial Roadways

The most current version of the SCVCTM that includes all the cumulative projects in the vicinity of the project site is the version of the model utilized in connection with preparation of the *One Valley One Vision (OVOV) Valley-Wide Traffic Study*, September 2009. The OVOV version of the SCVCTM provides forecasts of buildout conditions generally considered applicable to the year 2035, and it was updated specifically to include the proposed project and the current proposals for nearby cumulative projects. To estimate Santa Clarita Valley buildout conditions for a scenario without the project, the project traffic was subtracted from the SCVCTM forecasts for Valley buildout conditions.

The 2035 no project and with-project cumulative conditions peak hour turning movement volumes for the intersections in the project study area are depicted on Figures 4-13 through 4-20 in the AFA Traffic Impacts Analysis, EIR **Appendix 4.5**. Peak hour ICU values for project buildout conditions can be found in **Table 4.5-23, ICU and LOS Summary – Buildout Conditions with and without Project**, which provides a comparison between the no-project and the with-project conditions for 2035 cumulative conditions. As shown on the table, under buildout conditions with project traffic, several intersections are forecast to exceed the City's impact threshold. The following intersections are those at which the

proposed project's contribution would be cumulatively considerable, thereby resulting in significant cumulative impacts under cumulative buildout conditions:

7. I-5 SB Ramps & SR-126 (Caltrans/County)
9. The Old Road & I-5 SB Ramps (Caltrans/County)
10. I-5 SB Ramps & Magic Mountain Parkway (Caltrans/County)
11. I-5 NB Ramps & Magic Mountain Parkway (Caltrans/City)
12. I-5 SB Ramps & Valencia Boulevard (Caltrans/County)
14. I-5 SB Ramps & McBean Parkway (Caltrans/County)
16. I-5 SB Ramps/Marriott Way & Pico Canyon Road (Caltrans/County)
17. I-5 NB On/Off & Lyons Avenue (Caltrans/City)
25. The Old Road & Rye Canyon Road (County)
26. The Old Road & Magic Mountain Parkway (County)
28. The Old Road & McBean Parkway (County)
37. Tourney Road & Magic Mountain Parkway (City)
45. McBean Parkway & Magic Mountain Parkway (City)
48. McBean Parkway & Newhall Ranch Road (City)
51. Wiley Canyon Road & Lyons Avenue (City)
54. Orchard Village Road & Wiley Canyon (City)
55. Orchard Village Road & McBean (City)
57. Valencia Boulevard & Magic Mountain Parkway (City)
66. Bouquet Canyon Road & Newhall Ranch Road (City)
94. Commerce Center Drive & SR-126 (County/Caltrans)

(2) Year 2035 Cumulative Impacts on Freeway Mainline

Long-range cumulative impacts on freeways (I-5) were assessed based on a peak hour analysis as recommended by Caltrans and as required by the CMP, which identifies peak hour directional volumes as the basis for the evaluation. LOS was calculated based on volume-density (passenger cars per hour per lane) using the HCM procedures for mainline freeway segment analysis, as recommended by Caltrans.

Table 4.5-23
ICU and LOS Summary – Buildout Conditions with and without Project

Intersection	Year 2035 Cumulative Conditions without Project				Year 2035 Cumulative Conditions with Project				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.96	E	0.96	E	0.97	**E**	0.98	**E**	**0.01**	**0.02**
9. The Old Road & I-5 SB Ramps	0.84	D	1.34	F	0.85	D	1.35	**F**	0.01	**0.01**
10. I-5 SB Ramps & Magic Mountain Parkway	0.82	D	0.88	D	0.89	D	0.95	**E**	0.07	**0.07**
12. I-5 SB Ramps & Valencia Boulevard	0.77	C	1.19	F	0.81	D	1.22	**F**	0.04	**0.03**
14. I-5 SB Ramps & McBean Parkway	0.72	C	0.94	E	0.74	C	0.98	**E**	0.02	**0.04**
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.67	B	1.08	F	0.69	B	1.09	**F**	0.02	**0.01**
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & SR-126	0.59	A	0.69	B	0.60	A	0.71	C	0.01	0.02
11. I-5 NB Ramps & Magic Mountain	0.78	C	0.86	D	0.87	D	0.95	**E**	0.09	**0.09**
13. I-5 NB Ramps & Valencia	0.78	C	0.83	D	0.79	C	0.84	D	0.01	0.01
15. I-5 NB Ramps & McBean	0.60	A	0.67	B	0.62	B	0.69	B	0.02	0.02
17. I-5 NB On/Off & Lyons Ave	0.56	A	0.89	D	0.57	A	0.91	**E**	0.01	**0.02**
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.73	F	2.04	F	1.79	**F**[1]	2.10	**F**[1]	**0.06**	**0.06**
26. The Old Road & Magic Mountain Parkway	0.66	B	0.79	C	0.78	C	0.93	**E**	0.12	**0.14**
27. The Old Road & Valencia Boulevard	0.72	C	0.83	D	0.79	C[1]	0.89	D[1]	0.07	0.06
28. The Old Road & McBean Parkway	0.63	B	0.94	E	0.70	B	0.98	**E**	0.07	**0.04**
29. The Old Road & Pico Canyon Road	0.89	D	0.96	E	0.91	E[1]	0.97	E[1]	0.02	0.01
94. Commerce Center Drive & SR-126	1.31	F	1.60	F	1.60	**F**	1.89	**F**	**0.29**	**0.29**
105. Westridge Parkway & Valencia Boulevard	0.58	A	0.62	B	0.59	A	0.76	C	0.01	0.14
108. Stevenson Ranch Parkway & Pico Canyon Road	0.61	B	0.79	D	0.61	B	0.79	C	0.00	0.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.48	A	0.58	A	0.48	A	0.58	A	0.00	0.00

Intersection	Year 2035 Cumulative Conditions without Project				Year 2035 Cumulative Conditions with Project				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
City Arterial Intersections										
30. Stanford & Rye Canyon	0.55	A	0.77	C	0.57	A	0.78	C	0.02	0.01
33. Copper Hill & Newhall Ranch	0.78	C	0.84	D	0.81	D	0.87	D	0.03	0.03
35. Copper Hill & Decoro	0.70	B	0.80	C	0.72	C	0.81	D	0.02	0.01
36. Tourney & Valencia	0.67	B	0.87	D	0.68	B	0.88	D	0.01	0.01
37. Tourney & Magic Mountain	0.67	B	0.86	D	0.74	C	0.93	**E**	0.07	**0.07**
44. McBean & Valencia	0.69	B	0.94	E	0.70	B	0.94	E	0.01	0.00
45. McBean & Magic Mountain	0.92	E	1.19	F	0.96	E[1]	1.22	**F**[1]	0.04	**0.03**
48. McBean & Newhall Ranch	0.81	D	1.11	F	0.83	D	1.15	**F**	0.02	**0.04**
49. McBean & Decoro	0.65	B	0.66	B	0.65	B	0.66	B	0.00	0.00
51. Wiley Canyon & Lyons Cyn	0.70	B	1.07	F	0.71	C	1.08	**F**	0.01	**0.01**
54. Orchard Village & Wiley Cyn	1.06	F	1.42	F	1.08	**F**[1]	1.44	**F**[1]	**0.02**	**0.02**
55. Orchard Village & McBean	0.90	D	1.20	F	0.92	E[1]	1.23	**F**[1]	0.02	**0.03**
57. Valencia & Magic Mountain	1.10	F	1.24	F	1.12	**F**	1.25	**F**	**0.02**	**0.01**
65. Bouquet & Soledad	0.78	C	0.99	E	0.79	C	0.99	E	0.01	0.00
66. Bouquet & Newhall Ranch[2]	0.93~~9~~	E	~~1.14~~ .95	E~~F~~	0.95~~9~~	**E**	~~1.17~~ .97	**E~~F~~**	**0.02**~~0~~	**0.02**~~3~~

Bold = Significant Impact
Intersection Level of Service Performance Criteria is LOS D, unless noted otherwise.
[1] *LOS E is the Level of Service Performance Criteria for this location*
Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5***
[2] See *Mission Village - Responses to Comments Analysis*, AFA (April 29, 2011), **Final EIR, Appendix F4.5**.

The results of the analysis are provided in **Table 4.5-24, Freeway Volumes and V/C Ratios - 2035 Valley Buildout Conditions (HOV 2000 VPH)** and **Table 4.5-24A, Freeway Volumes and V/C Ratios - 2035 Valley Buildout Conditions (HOV 1600 VPH)**. For this scenario, the full I-5 Improvement Project (I-5 Truck Lane and HOV project) is presumed to be in place, as are new HOV lanes south of the SR-14 interchange (I-5/SR-14 Direct HOV Connector project). As noted above, Caltrans presently is implementing the I-5/SR-14 Direct HOV Connector project with completion scheduled for 2012, and the I-5 Improvement Project (I-5 HOV Truck Lane Project SR-14 to Parker Road) ~~with completion~~ is scheduled for completion in 2016. As under the 2021 scenario, two separate analyses were conducted, one utilizing a 2000 VPH capacity for the HOV lanes and the second utilizing a 1600 VPH capacity for the HOV lanes.

As shown on **Table 4.5-24**, under the HOV 2000 VPH capacity scenario, the incremental increase in traffic resulting from the proposed project would not exceed 0.02 and, therefore, the proposed project would not result in significant cumulative impacts to the I-5 freeway under this scenario. Similarly, as shown on **Table 4.5-24A**, under the HOV 1600 VPH capacity scenario, the incremental increase in traffic resulting from the proposed project would not exceed 0.02 and, therefore, the proposed project would not result in

significant cumulative impacts to the I-5 freeway under this scenario. While several segments of the southbound HOV lane would exceed a V/C ratio of 1.00 under this scenario, since the 1600 capacity used for the HOV lane represents mid-LOS C conditions, a V/C ratio of 1.00 in the HOV lanes actually represents LOS C/D conditions and, therefore, a better operating condition than does a V/C ratio of 1.00 in a mixed-flow lane, which represents LOS E/F.

Based on the above analysis, and because the increment of project traffic decreases as the distance from the project site increases, the project also would not result in significant traffic impacts on the I-5 mainline north of Lake Hughes, nor south of the confluence of the I-5 and SR-14.

~~Nonetheless~~ The potential traffic impacts of the Mission Village project also were analyzed as part of the larger Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) project. The RMDP/SCP project was evaluated in a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR; SCH No. 2000011025) prepared by the U.S. Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG). The EIS/EIR analyzed the potential impacts associated with buildout of the Newhall Ranch Specific Plan, including Mission Village, the Valencia Commerce Center, and Entrada developments. The EIS/EIR determined that the development facilitated by the RMDP/SCP project would result in potentially significant cumulative impacts to I-5 and includes mitigation measures requiring that the project applicant contribute its fair-share of the costs to implement the I-5 Improvement Project. (See RMDP/SCP EIS/EIR Section 4.8, Traffic, Mitigation Measures TR-10 through TR-18. Relevant portions of RMDP/SCP EIS/EIR Section 4.8 are included in **Final EIR, Appendix F4.5**.) Thus, as identified in the EIS/EIR, when Mission Village traffic is considered as part of the larger volume of traffic that would be generated by the Newhall Ranch Specific Plan and other Westside development, the traffic generated by that larger project, in combination with other cumulative development within the Santa Clarita Valley and the surrounding areas, would result in significant cumulative impacts.

To implement the mitigation measures set forth in the EIS/EIR relative to Mission Village, and to ensure that the County is able to monitor and enforce such measures as they relate to the Mission Village project, this EIR includes mitigation measure MV 4.5-29, which requires the applicant to enter into an agreement with Caltrans to either construct or pay an equitable share of the costs to implement appropriate improvements. Please see **Section 11, Cumulative Mitigation Measures**, below, for additional information regarding MV 4.5-29.~~the project applicant presently is in negotiations with Caltrans regarding improvements to the I-5 freeway that would be funded, in part, by Westside development, including the Newhall Ranch Specific Plan area. While the proposed Mission Village project would not result in significant impacts to the I-5 freeway and, therefore, no mitigation is required under CEQA, the applicant and Caltrans, nevertheless, are working cooperatively towards transportation improvements for the facility.~~

Table 4.5-24
Freeway Volumes and V/C Ratios – 2035 Valley Buildout Conditions (HOV 2000 VPH)

Segment	Lanes	Capacity	Long-Range Without Project				Long-Range With Project				Project Increment	
			AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
			Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
Northbound												
401. North of Lake Hughes	4M	8,000	3,368	0.42	6,334	0.79	3,400	0.43	6,400	0.80	0.01	0.01
402. Between Lake Hughes & Parker	4M	8,000	3,655	0.46	7,388	0.92	3,700	0.46	7,500	0.94	0.00	0.02
403. Between Parker & Hasley Cyn	4M + 1H	10,000	4,047	0.40	8,848	0.88	4,100	0.41	9,000	0.90	0.01	0.02
404. Between Hasley Cyn & SR-126	4M + 1H + 1A	11,000	5,647	0.51	9,148	0.83	5,700	0.52	9,300	0.85	0.01	0.02
405. Between SR-126 & Rye Cyn	4M + 1H	10,000	6,000	0.60	8,077	0.81	6,000	0.60	8,100	0.81	0.00	0.00
406. Between Rye Cyn & Magic Mtn	4M + 1H	10,000	6,000	0.60	8,077	0.81	6,000	0.60	8,100	0.81	0.00	0.00
407. Between Magic Mtn & Valencia	4M + 1H + 1A	11,000	6,758	0.61	7,987	0.73	6,900	0.63	8,100	0.74	0.02	0.01
408. Between Valencia & McBean	4M + 1H	10,000	7,700	0.77	8,656	0.87	7,900	0.79	8,800	0.88	0.02	0.01
409. Between McBean & Pico/Lyons	4M + 1H	10,000	7,739	0.77	8,245	0.82	8,000	0.80	8,400	0.84	0.03	0.02
410. Between Pico/Lyons & Calgrove	4M + 1H + 1A	11,000	7,567	0.69	8,277	0.75	7,800	0.71	8,400	0.76	0.02	0.01
411. Between Calgrove & SR-14	4M + 1H + 1T	11,200	7,583	0.68	8,191	0.73	7,800	0.70	8,300	0.74	0.02	0.01
412. South of SR-14	6M + 2H + 2T	18,400	10,067	0.55	17,310	0.94	10,200	0.55	17,400	0.95	0.00	0.01
Southbound												
401. North of Lake Hughes	4M	8,000	4,613	0.58	6,366	0.80	4,700	0.59	6,400	0.80	0.01	0.00
402. Between Lake Hughes & Parker	4M	8,000	5,571	0.70	6,850	0.86	5,700	0.71	6,900	0.86	0.01	0.00
403. Between Parker & Hasley Cyn	4M + 1H	10,000	7,026	0.70	7,928	0.79	7,200	0.72	8,000	0.80	0.02	0.01

Segment	Lanes	Capacity	Long-Range Without Project				Long-Range With Project				Project Increment	
			AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
			Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
404. Between Hasley Cyn & SR-126	4M + 1H	10,000	7,338	0.73	9,241	0.92	7,500	0.75	9,300	0.93	0.02	0.01
405. Between SR-126 & Rye Cyn	4M + 1H + 1A	11,000	7,367	0.67	9,048	0.82	7,400	0.67	9,100	0.83	0.00	0.01
406. Between Rye Cyn & Magic Mtn	4M + 1H + 1A	11,000	7,373	0.67	10,239	0.93	7,400	0.67	10,300	0.94	0.00	0.01
407. Between Magic Mtn & Valencia	4M + 1H	10,000	7,231	0.72	9,717	0.97	7,500	0.75	9,900	0.99	0.03	0.02
408. Between Valencia & McBean	4M + 1H+ 1A	11,000	8,457	0.77	10,273	0.93	8,700	0.79	10,500	0.95	0.02	0.02
409. Between McBean & Pico/Lyons	4M + 1H	10,000	8,299	0.83	9,737	0.97	8,500	0.85	10,000	1.00	0.02	0.03
410. Between Pico/Lyons & Calgrove	4M + 1H + 1T	11,200	8,050	0.72	10,259	0.92	8,200	0.73	10,500	0.94	0.01	0.02
411. Between Calgrove & SR-14	4M + 1H + 2T	12,400	8,180	0.66	10,675	0.86	8,300	0.67	10,900	0.88	0.01	0.02
412. South of SR-14	6M + 2H + 2T	18,400	16,691	0.91	13,859	0.75	16,800	0.91	14,000	0.76	0.00	0.01

Notes:
M = Mixed-Flow/General Purpose Lane (Capacity = 2,200 vehicles per hour)
M = Mixed-Flow Lane on an Extended Uphill Grade, Without a Truck Lane (Capacity = 1,600 vehicles per hour)*
H = HOV Lane (Capacity = 2,200 vehicles per hour)
A = Auxiliary Lane (Capacity = 1,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5***

Table 4.5-24A
Freeway Volumes and V/C Ratios - 2035 Valley Buildout Conditions (HOV 1600 VPH)

Segment	Lanes	Capacities		Long-Range Without Project				Long-Range With Project				Project Increment	
				MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
		MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
Northbound - AM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	3,368	0.42	n/a	n/a	3,400	0.43	n/a	n/a	0.01	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	3,655	0.46	n/a	n/a	3,700	0.46	n/a	n/a	0.00	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	3,717	0.46	330	0.21	3,760	0.47	340	0.21	0.01	0.00
404. Between Hasley Canyon & SR-126	4M + 1H + 1A	9,000	1,600	5,277	0.59	370	0.23	5,320	0.59	380	0.24	0.00	0.01
405. Between SR-126 & Rye Canyon	4M + 1H	8,000	1,600	5,480	0.69	520	0.33	5,480	0.69	520	0.33	0.00	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H	8,000	1,600	5,450	0.68	550	0.34	5,450	0.68	550	0.34	0.00	0.00
407. Between Magic Mtn & Valencia	4M + 1H+ 1A	9,000	1,600	6,148	0.68	610	0.38	6,280	0.70	620	0.39	0.02	0.01
408. Between Valencia & McBean	4M + 1H	8,000	1,600	6,990	0.87	710	0.44	7,170	0.90	730	0.46	0.03	0.02
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	7,019	0.88	720	0.45	7,250	0.91	750	0.47	0.03	0.02
410. Between Pico/Lyons & Calgrove	4M + 1H+ 1A	9,000	1,600	6,857	0.76	710	0.44	7,070	0.79	730	0.46	0.03	0.02
411. Between Calgrove & SR-14	4M + 1H + 1T	9,200	1,600	6,863	0.75	720	0.45	7,060	0.77	740	0.46	0.02	0.01
412. South of SR-14	6M + 2H + 2T	14,400	3,200	9,057	0.63	1,010	0.32	9,180	0.64	1,020	0.32	0.01	0.00
Northbound - PM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	6,334	0.79	n/a	n/a	6,400	0.80	n/a	n/a	0.01	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	7,388	0.92	n/a	n/a	7,500	0.94	n/a	n/a	0.02	n/a

Segment	Lanes	Capacities		Long-Range Without Project				Long-Range With Project				Project Increment	
				MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
		MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	7,538	0.94	1,310	0.82	7,670	0.96	1,330	0.83	0.02	0.01
404. Between Hasley Canyon & SR-126	4M + 1H + 1A	9,000	1,600	7,848	0.87	1,300	0.81	7,980	0.89	1,320	0.83	0.02	0.02
405. Between SR-126 & Rye Canyon	4M + 1H	8,000	1,600	6,787	0.85	1,290	0.81	6,810	0.85	1,290	0.81	0.00	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H	8,000	1,600	6,797	0.85	1,280	0.80	6,820	0.85	1,280	0.80	0.00	0.00
407. Between Magic Mtn & Valencia	4M + 1H+ 1A	9,000	1,600	6,697	0.74	1,290	0.81	6,800	0.76	1,300	0.81	0.02	0.00
408. Between Valencia & McBean	4M + 1H	8,000	1,600	7,326	0.92	1,330	0.83	7,460	0.93	1,340	0.84	0.01	0.01
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	6,895	0.86	1,350	0.84	7,030	0.88	1,370	0.86	0.02	0.02
410. Between Pico/Lyons & Calgrove	4M + 1H+ 1A	9,000	1,600	6,897	0.77	1,380	0.86	7,010	0.78	1,390	0.87	0.01	0.01
411. Between Calgrove & SR-14	4M + 1H + 1T	9,200	1,600	6,811	0.74	1,380	0.86	6,910	0.75	1,390	0.87	0.01	0.01
412. South of SR-14	6M + 2H + 2T	14,400	3,200	14,190	0.99	3,120	0.98	14,270	0.99	3,130	0.98	0.00	0.00
Southbound - AM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	4,613	0.58	n/a	n/a	4,700	0.59	n/a	n/a	0.01	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	5,571	0.70	n/a	n/a	5,700	0.71	n/a	n/a	0.01	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	6,336	0.79	690	0.43	6,490	0.81	710	0.44	0.02	0.01
404. Between Hasley Canyon & SR-126	4M + 1H	8,000	1,600	6,628	0.83	710	0.44	6,770	0.85	730	0.46	0.02	0.02
405. Between SR-126 & Rye Canyon	4M + 1H+ 1A	9,000	1,600	6,657	0.74	710	0.44	6,690	0.74	710	0.44	0.00	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H+ 1A	9,000	1,600	6,663	0.74	710	0.44	6,690	0.74	710	0.44	0.00	0.00

Segment	Lanes	Capacities		Long-Range Without Project				Long-Range With Project				Project Increment	
				MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
		MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
407. Between Magic Mtn & Valencia	4M + 1H	8,000	1,600	6,481	0.81	750	0.47	6,720	0.84	780	0.49	0.03	0.02
408. Between Valencia & McBean	4M + 1H+ 1A	9,000	1,600	7,567	0.84	890	0.56	7,790	0.87	910	0.57	0.03	0.01
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	7,359	0.92	940	0.59	7,540	0.94	960	0.60	0.02	0.01
410. Between Pico/Lyons & Calgrove	4M + 1H + 1T	9,200	1,600	7,060	0.77	990	0.62	7,190	0.78	1,010	0.63	0.01	0.01
411. Between Calgrove & SR-14	4M + 1H + 2T	10,400	1,600	7,170	0.69	1,010	0.63	7,280	0.70	1,020	0.64	0.01	0.01
412. South of SR-14	6M + 2H + 2T	14,400	3,200	13,701	0.95	2,990	0.93	13,800	0.96	3,000	0.94	0.01	0.01
Southbound - PM Peak Hour													
401. North of Lake Hughes	4M	8,000	n/a	6,366	0.80	n/a	n/a	6,400	0.80	n/a	n/a	0.00	n/a
402. Between Lake Hughes & Parker	4M	8,000	n/a	6,850	0.86	n/a	n/a	6,900	0.86	n/a	n/a	0.00	n/a
403. Between Parker & Hasley Canyon	4M + 1H	8,000	1,600	6,608	0.83	1,320	0.83	6,670	0.83	1,330	0.83	0.00	0.00
404. Between Hasley Canyon & SR-126	4M + 1H	8,000	1,600	7,851	0.98	1,390	0.87	7,900	0.99	1,400	0.88	0.01	0.01
405. Between SR-126 & Rye Canyon	4M + 1H+ 1A	9,000	1,600	7,578	0.84	1,470	0.92	7,630	0.85	1,470	0.92	0.01	0.00
406. Between Rye Canyon & Magic Mtn	4M + 1H+ 1A	9,000	1,600	8,399	0.93	1,840	1.15	8,460	0.94	1,840	1.15	0.01	0.00
407. Between Magic Mtn & Valencia	4M + 1H	8,000	1,600	7,777	0.97	1,940	1.21	7,960	1.00	1,940	1.21	0.03	0.00
408. Between Valencia & McBean	4M + 1H+ 1A	9,000	1,600	8,313	0.92	1,960	1.23	8,540	0.95	1,960	1.23	0.03	0.00
409. Between McBean & Pico/Lyons	4M + 1H	8,000	1,600	7,747	0.97	1,990	1.24	8,000	1.00	2,000	1.25	0.03	0.01

Segment	Lanes	Capacities		Long-Range Without Project				Long-Range With Project				Project Increment	
				MF Lanes		HOV Lanes		MF Lanes		HOV Lanes			
		MF Lanes	HOV Lanes	Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	MF	HOV
410. Between Pico/Lyons & Calgrove	4M + 1H + 1T	9,200	1,600	8,389	0.91	1,870	1.17	8,610	0.94	1,890	1.18	0.03	0.01
411. Between Calgrove & SR-14	4M + 1H + 2T	10,400	1,600	8,885	0.85	1,790	1.12	9,090	0.87	1,810	1.13	0.02	0.01
412. South of SR-14	6M + 2H + 2T	14,400	3,200	11,719	0.81	2,140	0.67	11,850	0.82	2,150	0.67	0.01	0.00

MF (or M) = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
HOV (or H) = HOV Lane (Capacity = 1,600 vehicles per hour)
A = Auxiliary Lane (Capacity = 1,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.

(3) Year 2035 Cumulative Impacts - No Potrero Canyon Road Bridge Scenario

The County's long-term plans as contained in the Los Angeles County Highway Plan, and the approved Newhall Ranch Specific Plan, identify three future bridge crossings of the Santa Clara River within the Specific Plan boundary – Commerce Center Drive Bridge, Long Canyon Road Bridge, and Potrero Canyon Road Bridge. Accordingly, the long-term (2035) cumulative impacts analysis presented above assumes the Potrero Canyon Road Bridge would be constructed and in place by 2035, consistent with the County's plans and the approved Specific Plan. However, the CDFG has approved, and the Corps presently is considering, a Newhall Ranch development scenario under which the Potrero Canyon Road Bridge would not be covered by federal and state permits. Specifically, as part of the Newhall Ranch RMDP/SCP, CDFG approved an alternative referred to as the Draft Least Environmentally Damaging Practicable Alternative (Draft LEDPA), which the Corps presently is considering as well. Under this alternative, in an effort to reduce impacts to jurisdictional waters and wetlands in the Santa Clara River and lower Potrero Canyon, construction of the Potrero Canyon Road Bridge would not be covered by the state and federal permits issued in connection with the RMDP/SCP.

In consideration of this potentiality, a supplemental analysis was conducted by AFA to determine what effect, if any, elimination of the Potrero Canyon Road Bridge would have on the results of the Long-Range (2035) Cumulative impacts analysis presented above, which includes the bridge as part of the circulation system. (See AFA Memorandum, *Long-Range Buildout Conditions Without Potrero Canyon Road Bridge* (February 22, 2011). A copy of the memorandum is included in **Appendix F4.5**. Note that the other analysis scenarios presented in this section do not include the bridge as part of the circulation system.) As

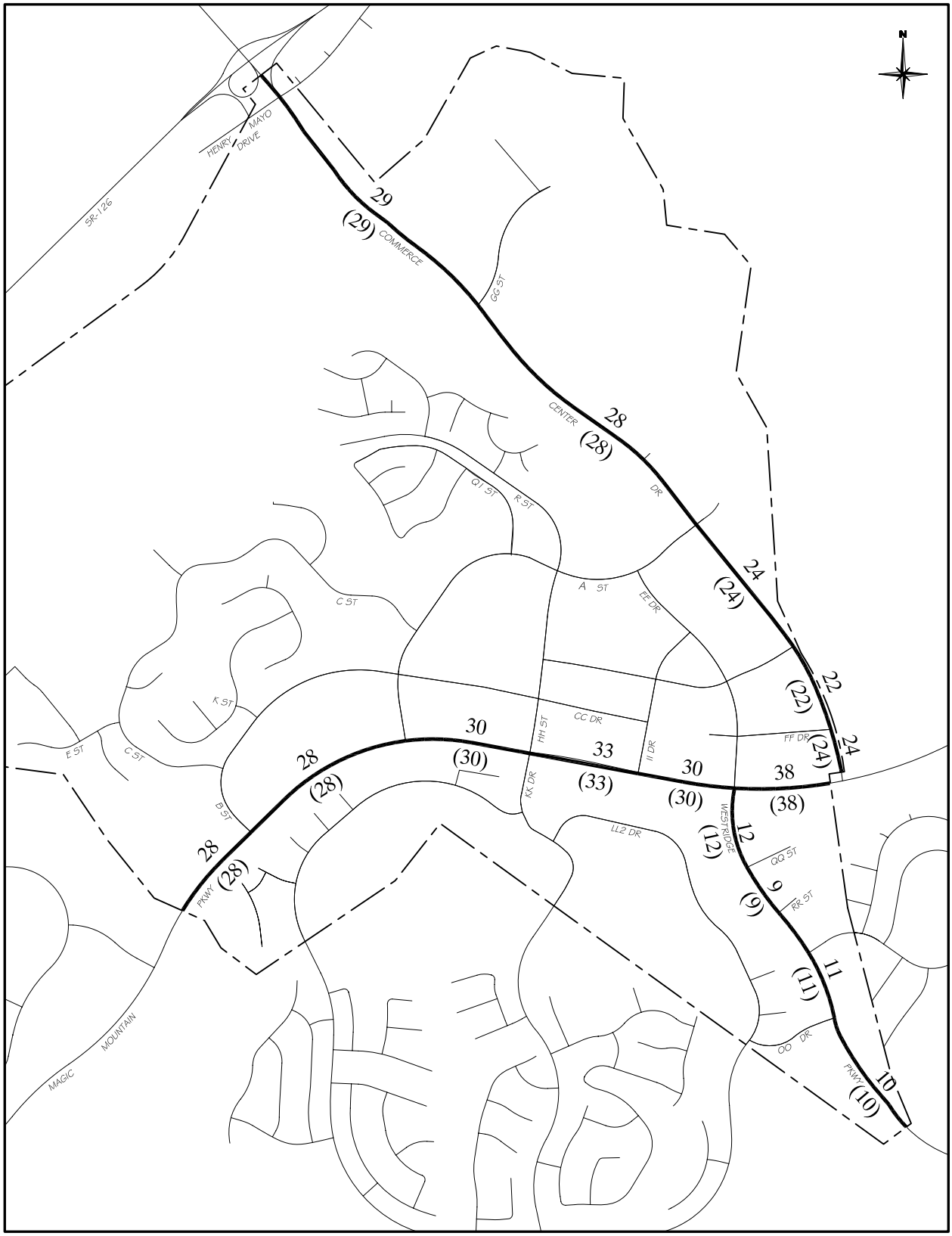
explained below, the analysis determined that under the "No-Bridge" scenario, there are no locations where removal of the Potrero Canyon Road Bridge would result in a new deficiency (i.e., LOS E or F) not identified under the "With-Bridge" scenario, or worsen an otherwise deficient condition (i.e., LOS E to LOS F) identified under the With-Bridge scenario and, therefore, the impact determinations made under the Long-Range (2035) Cumulative impacts analysis presented above would be unaffected by elimination of the bridge.

Under the No-Bridge analysis, long-range cumulative intersection ICUs and freeway V/C ratios were calculated using the SCVCTM, consistent with the methodology utilized for the With-Bridge scenario analysis.

The internal (i.e., on-site) arterial roadways were assessed by comparing SCVCTM model runs for the internal roadways under conditions with and without the bridge. The SCVCTM showed no discernible change to the traffic volumes on the arterial roadways within the project site with the bridge removed, as illustrated on **Figure 4.5-16, ADT Volumes On-Site - With and Without Potrero Canyon Road Bridge**. Local and collector streets within the project site are beyond the level of detail provided by the SCVCTM; however, because there would be no discernible change to the traffic volumes on the arterial roadways, traffic volumes on these local/collector streets would not be affected by removal of the bridge.

As to the off-site roadways, peak hour ICU values under the long-range No-Bridge scenario were calculated and are presented in **Table 4.5-25, ICU and LOS Comparison - Long-Range Buildout Cumulative Conditions (2035) With and Without Potrero Canyon Road Bridge**, which also presents the long-range With-Bridge ICU results presented in **Table 4.5-23** above. As shown on **Table 4.5-25**, there are no locations where removal of the Potrero Canyon Road Bridge would result in a deficiency (i.e., LOS E or F) not identified under the With-Bridge scenario, or worsen an otherwise deficient condition (i.e., LOS E to LOS F) as compared to the With-Bridge scenario.; that is, the impact determinations made under the With-Bridge scenario would be unaffected by elimination of the bridge. In each case where the conditions with the Bridge are LOS E or F, removal of the Bridge either has no effect on the intersection ICU, or in some cases, removal of the Bridge would actually improve conditions due to the resulting changes in travel distribution patterns. (Detailed ICU calculation worksheets are provided in **Final EIR, Appendix F4.5**.)

With respect to the I-5 freeway, **Table 4.5-26, Freeway Volumes and V/C Ratios - Long-Range Buildout Cumulative Conditions (2035) With and Without Potrero Canyon Road Bridge**, provides a comparison between the long-range buildout cumulative conditions for the I-5 freeway under the No-Bridge scenario and the long-range buildout cumulative With-Bridge conditions shown in **Table 4.5-24A**, above. The comparison shows that there are no freeway segments where removal of the Bridge would result in a new deficiency (i.e., V/C > 1.00) or worsen an otherwise deficient location previously identified.



Legend

40	ADT with Potrero Bridge (000s)
(40)	ADT without Potrero Bridge (000s)
———	On-Site Arterial Roadway
— - —	Project Boundary

Figure 1

ADT VOLUMES ON-SITE - WITH AND WITHOUT POTRERO CANYON ROAD BRIDGE

Mission Village
Long-Range Buildout Conditions without Potrero Canyon Road Bridge

Austin-Foust Associates, Inc.
105370_ADT2.dwg

Table 4.5-25
ICU and LOS Comparison – Long-Range Buildout Cumulative Conditions (2035) With and Without Potrero Canyon Road Bridge

Intersection	Long-Range Buildout Cumulative Conditions with Potrero Bridge				Long-Range Buildout Cumulative Conditions without Potrero Bridge				Net Change	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	.83	D	.90	D	.84	D	.90	D	.01	.00
9. The Old Road & I-5 SB Ramps	.81	D	1.06	F	.82	D	1.03	F	.01	-.03
10. I-5 SB Ramps & Magic Mountain Parkway	.75	C	.82	D	.76	C	.82	D	.01	.00
12. I-5 SB Ramps & Valencia Boulevard	.65	B	.96	E	.65	B	.96	E	.00	.00
14. I-5 SB Ramps & McBean Parkway	.62	B	.84	D	.62	B	.84	D	.00	.00
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	.69	B	1.08	F	.66	B	.99	E	-.03	-.09
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & Henry Mayo Drive (SR-126)	.60	A	.71	C	.62	B	.71	C	.02	.00
11. I-5 NB Ramps & Magic Mountain Parkway	.76	C	.84	D	.76	C	.85	D	.00	.01
13. I-5 NB Ramps & Valencia Boulevard	.79	C	.84	D	.79	C	.85	D	.00	.01
15. I-5 NB Ramps & McBean Parkway	.62	B	.69	B	.61	B	.69	B	-.01	.00
17. I-5 NB On/Off & Lyons Avenue	.57	A	.79	C	.55	A	.79	C	-.02	.00
County Arterial Intersections										
25. The Old Road & Rye Canyon	.83	D	.89	D	.83	D	.89	D	.00	.00
26. The Old Road & Magic Mountain Parkway	.78	C	.89	D	.79	C	.90	D	.01	.01
27. The Old Road & Valencia Boulevard	.79	C	.89	D	.80	C	.89	D	.01	.00
28. The Old Road & McBean Parkway	.70	B	.89	D	.70	B	.90	D	.00	.01
29. The Old Road & Pico Canyon Road	.91	E	.97	E	.88	D	.95	E	-.03	-.02
81. Commerce Center Drive & Henry Mayo Drive	.71	C	.71	C	.71	C	.69	B	.00	-.02
82. Commerce Center Drive & SR-126 EB Ramps	.42	A	.43	A	.42	A	.43	A	.00	.00
83. Commerce Center Drive & SR-126 WB Ramps	.85	D	.83	D	.83	D	.82	D	-.02	-.01
105. Westridge Parkway & Valencia Boulevard	.59	A	.76	C	.58	A	.75	C	-.01	-.01

Intersection	Long-Range Buildout Cumulative Conditions with Potrero Bridge				Long-Range Buildout Cumulative Conditions without Potrero Bridge				Net Change	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
108. Stevenson Ranch Parkway & Pico Canyon Road	.61	B	.79	C	.54	A	.79	C	-.07	.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	.48	A	.58	A	.48	A	.58	A	.00	.00
City Arterial Intersections										
30. Avenue Stanford & Rye Canyon Road	.57	A	.78	C	.57	A	.81	D	.00	.03
33. Copper Hill Drive & Newhall Ranch Road	.81	D	.87	D	.81	D	.86	D	.00	-.01
35. Copper Hill Drive & Decoro Drive	.72	C	.81	D	.72	C	.81	D	.00	.00
36. Tourney Road & Valencia Boulevard	.68	B	.88	D	.67	B	.90	D	-.01	.02
37. Tourney Road & Magic Mountain Parkway	.74	C	.82	D	.75	C	.81	D	.01	-.01
44. McBean Parkway & Valencia Boulevard	.70	B	.94	E	.69	B	.94	E	-.01	.00
45. McBean Parkway & Magic Mountain Parkway	.81	D	1.06	F	.83	D	1.06	F	.02	.00
48. McBean Parkway & Newhall Ranch Road	.83	D	.89	D	.83	D	.89	D	.00	.00
49. McBean Parkway & Decoro Drive	.65	B	.66	B	.65	B	.66	B	.00	.00
51. Wiley Canyon Road & Lyons Avenue	.63	B	.96	E	.63	B	.92	E	.00	-.04
54. Orchard Village Road & Wiley Canyon Road	.98	E	1.27	F	.97	E	1.27	F	-.01	.00
55. Orchard Village Road & McBean Parkway	.91	E	1.18	F	.91	E	1.18	F	.00	.00
57. Valencia Boulevard & Magic Mountain Parkway	.93	E	1.12	F	.93	E	1.11	F	.00	-.01
65. Bouquet Canyon Road & Soledad Canyon Road	.79	C	.99	E	.80	C	.99	E	.01	.00
66. Bouquet Canyon Road & Newhall Ranch Road	.95	E	.97	E	.95	E	.96	E	.00	-.01

Note: ICUs include Project Mitigation as identified in the Mission Village TIA.

Level of service ranges: *.00 - .60 A* *.61 - .70 B* *.71 - .80 C* *.81 - .90 D* *.91 - 1.00 E* *Above 1.00 F*

Table4.5-26
Freeway Volumes and V/C Ratios – Long-Range Buildout Cumulative Conditions (2035)
with and without Potrero Canyon Road Bridge

Segment		Lanes	Capacity	Long-Range Buildout Cumulative Conditions with Bridge				Long-Range Buildout Cumulative Conditions without Bridge				Net Change	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
Northbound													
401	North of Lake Hughes	4M	8,000	3,400	.43	6,400	.80	3,400	.43	6,400	.80	.00	.00
402	Between Lake Hughes & Parker	4M	8,000	3,700	.46	7,500	.94	3,700	.46	7,600	.95	.00	.01
403	Between Parker & Hasley Canyon	4M + 1H	9,600	4,100	.43	9,000	.94	4,100	.43	9,000	.94	.00	.00
404	Between Hasley Canyon & SR-126	4M + 1H + 1A	10,600	5,700	.54	9,300	.88	5,800	.55	9,300	.88	.01	.00
405	Between SR-126 & Rye Canyon	4M + 1H	9,600	6,000	.63	8,100	.84	6,100	.64	8,100	.84	.01	.00
406	Between Rye Canyon & Magic Mtn	4M + 1H	9,600	6,000	.63	8,100	.84	6,100	.64	8,100	.84	.01	.00
407	Between Magic Mtn & Valencia	4M +1H + 1A	10,600	6,900	.65	8,100	.76	7,000	.66	8,100	.76	.01	.00
408	Between Valencia & McBean	4M + 1H	9,600	7,900	.82	8,800	.92	8,100	.84	8,800	.92	.02	.00
409	Between McBean & Pico/Lyons	4M + 1H	9,600	8,000	.83	8,400	.88	8,100	.84	8,400	.88	.01	.00
410	Between Pico/Lyons & Calgrove	4M + 1H + 1A	10,600	7,800	.74	8,400	.79	7,900	.75	8,400	.79	.01	.00
411	Between Calgrove & SR-14	4M + 1H + 1T	10,800	7,800	.72	8,300	.77	7,800	.72	8,300	.77	.00	.00
412	South of SR-14	6M + 2H + 2T	17,600	10,200	.58	17,400	.99	10,200	.58	17,400	.99	.00	.00
Southbound													
401	North of Lake Hughes	4M	8,000	4,700	.59	6,400	.80	4,700	.59	6,400	.80	.00	.00
402	Between Lake Hughes & Parker	4M	8,000	5,700	.71	6,900	.86	5,700	.71	6,900	.86	.00	.00
403	Between Parker & Hasley Canyon	4M + 1H	9,600	7,200	.75	8,000	.83	7,100	.74	8,000	.83	-.01	.00
404	Between Hasley Canyon & SR-126	4M + 1H	9,600	7,500	.78	9,300	.97	7,600	.79	9,300	.97	.01	.00
405	Between SR-126 & Rye Canyon	4M + 1H + 1A	10,600	7,400	.70	9,100	.86	7,500	.71	9,100	.86	.01	.00
406	Between Rye Canyon & Magic Mtn	4M + 1H + 1A	10,600	7,400	.70	10,300	.97	7,400	.70	10,300	.97	.00	.00
407	Between Magic Mtn & Valencia	4M + 1H	9,600	7,500	.78	9,900	1.03	7,500	.78	9,900	1.03	.00	.00

Segment		Lanes	Capacity	Long-Range Buildout Cumulative Conditions with Bridge				Long-Range Buildout Cumulative Conditions without Bridge				Net Change	
				AM Pk Hr		PM Pk Hr		AM Pk Hr		PM Pk Hr			
				Vol	V/C	Vol	V/C	Vol	V/C	Vol	V/C	AM	PM
408	Between Valencia & McBean	4M + 1H + 1A	10,600	8,700	.82	10,500	.99	8,700	.82	10,500	.99	.00	.00
409	Between McBean & Pico/Lyons	4M + 1H	9,600	8,500	.89	10,000	1.04	8,400	.88	10,000	1.04	-.01	.00
410	Between Pico/Lyons & Calgrove	4M + 1H + 1T	10,800	8,200	.76	10,500	.97	8,200	.76	10,500	.97	.00	.00
411	Between Calgrove & SR-14	4M + 1H + 2T	12,000	8,300	.69	10,900	.91	8,300	.69	10,900	.91	.00	.00
412	South of SR-14	6M + 2H + 2T	17,600	16,800	.95	14,000	.80	16,800	.95	14,000	.80	.00	.00

M = Mixed-Flow/General Purpose Lane (Capacity = 2,000 vehicles per hour)
T = Truck Lane (Capacity = 1,200 vehicles per hour)
H = HOV Lane (Capacity = 1,600 vehicles per hour)
A = Auxiliary Lane (Capacity = 1,000 vehicles per hour)
Capacities derived from PeMS data and through discussions with Caltrans staff.

Mitigation measures that would reduce the Project impacts to less than significant for each of the off-site locations significantly impacted under the Long-Range (2035) Buildout Cumulative scenario are identified below in **Subsection 11, Cumulative Mitigation Measures**. As explained above, removal of the Potrero Canyon Road Bridge from the long-range buildout cumulative conditions setting would not result in the creation of new intersection or freeway deficiencies. At locations where the With-Bridge scenario analysis identified deficiencies under the long-range buildout cumulative conditions setting, the analysis presented in this section shows that removal of the Potrero Canyon Road Bridge would not worsen those deficient conditions or result in newly identified deficient conditions. Since the mitigation measures identified in **Subsection 11** would mitigate all significantly impacted deficient locations, and since removal of the Potrero Canyon Road Bridge from the long-range buildout cumulative setting would not result in new or worsened deficient locations, the Section 11 mitigation measures are applicable to the No-Bridge scenario and all identified impacts would be fully mitigated and no further mitigation is necessary.

Thus, buildout of the Specific Plan area, including Mission Village, can occur without the Potrero Canyon Road Bridge in place while maintaining acceptable levels of service. This is due primarily to the fact that the Potrero Canyon Road Bridge was included as part of the Specific Plan for purposes other than maintaining acceptable LOS, such as facilitating access to State Route 126. The Potrero Canyon Road Bridge is not essential to provide acceptable levels of service upon buildout of the Mission Village project and its absence does not affect the results of the traffic impacts analysis, including the identification of significant impacts, as presented in the Draft EIR.

11. CUMULATIVE MITIGATION MEASURES

If all of the cumulative projects are approved, each would be required to construct or finance, through the applicable B&T District or otherwise, its fair share of the improvements necessary to mitigate the affected roadways significantly impacted by the respective project. Additionally, project-specific environmental analysis conducted for other cumulative projects is to comply with the requirements of the CMP, which provides lead agencies with the opportunity to assess each project's improvement program to ensure that it meets its mitigation goal.

Because the Mission Village project would result in significant cumulative impacts to County and City intersections and freeway interchange intersections under the long-range 2035 buildout scenario, the following mitigation is proposed to reduce the traffic-related impacts attributable to the project's share of increased cumulative traffic levels. The project is responsible for the payment of its fair-share of the costs of the recommend improvements, and the timing of these improvements shall be as determined by the then-current *Westside Roadway Phasing Analysis*:

7. I-5 SB Ramps & Henry Mayo Drive (SR-126) – The project's compliance with **mitigation MV 4.5-3** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

MV 4.5-16~~2~~ 9. The Old Road & I-5 SB Ramps – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to: (i) add a second northbound right-turn lane; (ii) add a second southbound left-turn lane; (iii) add a third southbound through lane; and (iv) convert the shared westbound left/right-turn lane to a second westbound left-turn lane and add a right-turn lane. (Project Share = 1.4 percent. Please refer to EIR **Appendix 4.5**, AFA Traffic Impacts Analysis, Appendix J, for fair-share calculations.)

MV 4.5-17~~3~~ 10. I-5 SB Ramps & Magic Mountain Parkway – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to re-stripe the shared southbound left-turn/through lane to a left-turn lane and the first southbound right-turn lane to a shared through/left-turn lane (Project Share = 19.7 percent)

MV 4.5-18~~4~~ 11. I-5 NB Ramps & Magic Mountain Parkway – ~~Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost~~ The improvement recommended to mitigate the project's identified significant impacts at this intersection is to re-stripe the shared northbound through/right-turn lane to a shared left-turn/through/right-turn lane. These improvements are located within the Valencia B&T District and, therefore, it is expected the improvements will be constructed through the Valencia B&T District. However, as the intersection is within the jurisdiction of the City of Santa Clarita, at the request of the City, the project applicant will construct the identified improvements and, under such scenario, shall be entitled to reimbursement from the Valencia B&T District for the full cost of the improvements, should the improvement not be constructed by the time it is identified as necessary in the most current County DPW approved Westside Roadway Phasing Analysis. ~~(Project Share = 17.6 percent)~~

12. I-5 SB Ramps & Valencia Boulevard – The project's compliance with **mitigation MV 4.5-4** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

MV 4.5-19~~5~~ 14. I-5 SB Ramps & McBean Parkway – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the costs to add a second southbound left-turn lane. (Project Share = 12.6 percent.)

MV 4.5-20~~16~~ 16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the costs to add: (i) a left-turn phase for the westbound left-turn lane (can be protected/permissive configuration); and (ii) right-turn overlap phasing for the northbound right-turn lane. (Project Share = 4.7% percent.)

MV 4.5-21 17. I-5 NB On/Off Ramps & Lyons Avenue – The improvements recommended to mitigate the project's identified significant impacts at this intersection are: (i) re-stripe the third westbound through lane to a right-turn lane; and (ii) re-stripe the second westbound through lane to a shared through/right-turn lane. These improvements are located within the Via Princessa B&T District and, therefore, it is expected the improvements will be constructed through the Via Princessa B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (7%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-22~~17~~ 25. The Old Road & Rye Canyon Road – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, and in addition to compliance with mitigation MV 4.5-5, the project applicant shall fund its fair share of the costs to: (i) add a third northbound through lane; (ii) add a third southbound through lane; and (iii) add a second and third westbound left-turn lane. (Project Share = 7.1 percent) (Note: This mitigation is supplemental to **mitigation MV 4.5-5**.)

MV 4.5-23~~18~~ 26. The Old Road & Magic Mountain Parkway – Consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis, the project applicant shall fund its fair share of the cost to add right-turn overlap phasing for the southbound right-turn lane. (Project Share = 21.1 percent)

28. The Old Road & McBean Pkwy – The project's compliance with **mitigation MV 4.5-1** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

MV 4.5-24 37. Tourney & Magic Mountain Parkway – The improvement recommended to mitigate the project's identified significant impacts at this intersection is to stripe a fourth eastbound through lane. This improvement is located within the Valencia B&T District and, therefore, it is expected the improvement will be constructed through the Valencia B&T District. However, as the intersection is within the jurisdiction of the City of Santa Clarita, at the request of the City, the project applicant will construct the identified improvement and, under such scenario, shall be entitled to reimbursement from the Valencia B&T District for the full cost of the improvement, should the improvement not be constructed by the time it is identified as necessary in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

45. McBean Parkway & Magic Mountain Parkway – The project's compliance with mitigation MV 4.5-6 would mitigate the project's contribution to the identified significant impact and no further mitigation is required.~~The improvements recommended to mitigate the project's identified significant impacts at this intersection are to re-stripe for a third eastbound through lane and add a right turn overlap phase for a westbound right turn lane. These improvements are located within and will be constructed through the~~

~~Valencia B&T District. Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

48. McBean Parkway & Newhall Ranch Road – The project's compliance with mitigation MV 4.5-7 would mitigate the project's contribution to the identified significant impact and no further mitigation is required. ~~The improvements recommended to mitigate the project's identified significant impacts at this intersection are: (i) Re-stripe for a fourth westbound through lane; and (ii) Reconstruct the northbound approach to remove the pork chop island and reconfigure as conventional dual right turn lanes. These improvements are located within and will be constructed through the Valencia B&T District. Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-25 51. Wiley Canyon & Lyons – The improvement recommended to mitigate the project's identified significant impacts at this intersection is to re-stripe the eastbound right-turn lane to a third through lane (shared through/right-turn lane). This improvement is located within the Via Princessa B&T District and, therefore, it is expected the improvements will be constructed through the Via Princessa B&T District. However, as the intersection is within the jurisdiction of the City of Santa Clarita, at the request of the City, the project applicant will construct the identified improvement and, under such scenario, shall be entitled to reimbursement from the Via Princessa B&T District for the full cost of the improvement, should the improvement not be constructed by the time it is identified as necessary in the most current County DPW approved Westside Roadway Phasing Analysis.~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-26 54. Orchard Village & Wiley Canyon – The improvement recommended to mitigate the project's identified significant impact at this intersection is to stripe a northbound right-turn lane. This improvement is located within the Via Princessa B&T District and, therefore, it is expected the improvement will be constructed through the Via Princessa B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (2%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~ (Note: In the event a northbound right-turn lane is striped as part of the Henry Mayo Newhall Memorial Hospital expansion project, the improvement recommended to mitigate the project's identified significant impact at this intersection is to add a second southbound left-turn lane and remove the existing southbound right-turn lane.)

55. Orchard Village & McBean Parkway – The project's compliance with mitigation MV 4.5-8 would mitigate the project's contribution to the identified significant impact and no further mitigation is required.~~The improvements recommended to mitigate the project's identified significant impacts at this intersection are: (i) add a separate southbound left-turn lane; (ii) add a separate southbound through lane; (iii) add a separate southbound right-turn lane; and (iv) reconfigure the existing southbound right-turn~~

~~lane as a shared left-turn through lane, as identified in the mitigation for the Hospital expansion project. These improvements are located within and will be constructed through the Valencia B&T District. Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~

MV 4.5-27 57. Valencia Boulevard & Magic Mountain Parkway – The improvement recommended to mitigate the project's identified significant impacts at this intersection is to add a second westbound left-turn lane by removing or relocating the existing east leg raised median. These improvements are located within the Valencia B&T District and, therefore, it is expected the improvement will be constructed through the Valencia B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvements as calculated based on project traffic volumes (6%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~ (Note: In the event a second westbound left-turn lane is added as part of the Henry Mayo Newhall Memorial Hospital expansion project, the improvement recommended to mitigate the project's identified significant impact at this intersection is to reinstate a dedicated westbound right-turn lane (the Hospital project would remove the existing right-turn lane) and add a third eastbound through lane.)

MV 4.5-28 66. Bouquet Canyon Road & Newhall Ranch Road – The improvement recommended to mitigate the project's identified significant impacts at this intersection is to restripe ~~a third~~ the eastbound approach to consist of two ~~through lane while maintaining three~~ eastbound left-turn lanes, four eastbound through lanes, and two eastbound right-turn lanes. This improvement is located within the Valencia B&T District and, therefore, it is expected the improvement will be constructed through the Valencia B&T District. However, because the intersection is within the jurisdiction of the City of Santa Clarita, the City desires to reserve the right to modify such mitigation improvements in the future. Therefore, at the request of the City, to facilitate the potential construction of an alternative improvement, the applicant will pay, or utilize existing B&T credits to fund, an amount equivalent to the applicant's percentage cost of the identified improvement as calculated based on project traffic volumes (4%), and under a timetable consistent with the milestones established in the most current County DPW approved Westside Roadway Phasing Analysis. ~~Therefore, the project's identified impacts will be reduced to a level below significant through the B&T District and no further mitigation is required.~~ (Note: This mitigation is supplemental to mitigation MV 4.5-9.)

94. Commerce Center Drive & SR-126 – The project's compliance with **mitigation MV 4.5-2** would mitigate the project's contribution to the identified significant impact and no further mitigation is required.

MV 4.5-~~1~~29 State Highways. The applicant shall work cooperatively with Caltrans to determine and provide transportation mitigation needed on State Highway facilities. The applicant shall

construct mitigation improvements or pay an equitable share for mitigation projects to the satisfaction of Caltrans. The applicant shall enter into a traffic mitigation agreement with Caltrans before or within six months of certification of the EIR.

Subsequent to circulation of the Draft EIR, Caltrans and the project applicant worked together to prepare an agreement under which the applicant will pay to Caltrans, at the time of issuance of project building permits, the project's pro-rata share of the I-5 Improvement Project, as determined by an I-5 shares analysis conducted as part of the agreement. Under the agreement, Caltrans acknowledges that the applicant's full payment of its proportionate share amount satisfies its mitigation obligations to Caltrans relative to the project. A copy of the agreement, which has been executed by the project applicant, and the corresponding shares analysis are included in the Final EIR. (See **Appendix F4.5,** Traffic Mitigation Agreement Fair Share Payment, and, Mission Village I-5 Share Calculations, AFA (March 8, 2011).) Should the County certify this EIR as adequate under CEQA and approve the Mission Village project, Caltrans, as a responsible agency, would utilize the certified EIR as the basis for executing the agreement.

a. Post-Mitigation Level of Significance

Table 4.5-25, ICU and LOS Summary - 2035 Cumulative Conditions with Mitigation, depicts the ICU and LOS for each of the cumulatively impacted intersections under with project and mitigation scenario. As shown on **Table 4.5-25**, implementation of the recommended mitigation would reduce the project's contribution to below cumulatively considerable levels.

As noted above, the *Westside Roadway Phasing Analysis* identifies the specific roadway and intersection improvements that are needed to mitigate the cumulative impacts of the Westside projects. Since the individual Westside projects will be developed concurrently, the phasing analysis identifies milestones based on residential unit counts and commercial square footages to specify when the specific improvements shall be in place. As such, the proposed project will be developed in accordance with these milestones and the corresponding specific improvements as identified in the phasing analysis.

b. Condominiums In Place Of Apartments Scenario

As noted on **Table 4.5-10, Mission Village Land Use and Trip Generation Summary**, the proposed project trip generation is based on a housing mix that would include 905 apartments and 2,315 condominium/townhomes; the impacts analysis presented above is based on that housing mix. However, the Specific Plan provides the applicant with certain flexibility relative to the specific type of housing to be built due, in part, to market considerations. For example, if at project buildout the rental market weakened while the for-sale market strengthened, the Specific Plan provides the applicant with the flexibility to adjust the housing mix such that the 905 apartments could be developed as

condominiums. However, under that scenario, the project trip generation would increase because the trip generation rate for townhomes/condominiums is higher (8.0) than is the trip rate for apartments (6.9). See **Table 4.5-10**.

To address the potential traffic-related impacts associated with such shift in housing type, the traffic impacts analysis considered a scenario in which all 905 apartments were developed instead as condominiums. The analysis determined that under this scenario, the proposed project would generate an additional 63 AM peak hour tripends, 100 more PM peak hour tripends, and 996 more daily tripends. (See EIR **Appendix 4.5**, Traffic Impacts Analysis, Table 4-18.)

To determine the impact of the additional trips that would be generated under an all condominium scenario, the net volume of trips external to the project site was distributed throughout the project study area. A summary of the ICU calculations based on this scenario is provided in **Table 4.5-26, ICU and LOS Summary – Existing plus Ambient plus Project With Mitigation (Condominium Scenario); Table 4.5-27, ICU and LOS Summary – Year 2021 Project Cumulative Conditions With Mitigation (Condominium Scenario);** and **Table 4.5-28, ICU and LOS Summary – Long-Range (2035) Project Cumulative Conditions With Mitigation (Condominium Scenario)**. As shown on the tables, with the mitigation measures recommended in this section, no additional project impacts would occur under these scenarios.

12. UNAVOIDABLE SIGNIFICANT IMPACTS

a. Project Impacts

Significant project traffic/access impacts would be reduced to less than significant levels with implementation of the mitigation measures recommended in this EIR section and there would be no unavoidable significant traffic/access impacts.

b. Cumulative Impacts

By implementing the mitigation measures discussed above that are attributable to the proposed project, and provided that the County and City require fair-share participation of the mitigation measures by other projects, no unavoidable significant cumulative traffic/access impacts would occur at any impacted roadway in the project study area.

Table 4.5-25
ICU and LOS Summary – 2035 Cumulative Conditions with Mitigation

Intersection	Buildout Conditions (Year 2035) without Project				Buildout Conditions (Year 2035) with Project with Mitigation				Change	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.96	E	0.96	E	0.83	D	0.90	D	-0.13	-0.06
9. The Old Road & I-5 SB Ramps	0.84	D	1.34	F	0.81	D	1.06	F	-0.03	-0.28
10. I-5 SB Ramps & Magic Mountain Parkway	0.82	D	0.88	D	0.75	C	0.82	D	-0.07	-0.06
12. I-5 SB Ramps & Valencia Boulevard	0.77	C	1.19	F	0.65	B	0.96	E	-0.12	-0.23
14. I-5 SB Ramps & McBean Parkway	0.72	C	0.94	E	0.62	B	0.84	D	-0.10	-0.10
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.67	B	1.08	F	0.69	B	1.08	F	0.02	0.00
Freeway Ramp Intersections (City)										
11. I-5 NB Ramps & Magic Mountain	0.78	C	0.86	D	0.76	C	0.84	D	-0.02	-0.02
17. I-5 NB On/Off & Lyons Ave	0.56	A	0.89	D	0.57	A	0.79	C	0.01	-0.10
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.73	F	2.04	F	.83	D[1]	0.89	D[1]	-0.90	-1.15
26. The Old Road & Magic Mountain Parkway	0.66	B	0.79	C	0.78	C	0.89	D	0.12	0.10
28. The Old Road & McBean Parkway	0.63	B	0.94	E	0.70	B	0.89	D	0.07	-0.05
94. Commerce Center Drive & SR-126	1.31	F	1.60	F	n/a (Grade Separated Intersection)					
City Arterial Intersections										
37. Tourney & Magic Mountain	0.67	B	0.86	D	0.74	C	0.82	D	0.07	-0.04
45. McBean & Magic Mountain	0.92	E	1.19	F	0.81	D[1]	1.06	F[1]	-0.11	-0.13
48. McBean & Newhall Ranch	0.81	D	1.11	F	0.83	D	0.89	D	0.02	-0.22
51. Wiley Canyon & Lyons Cyn	0.70	B	1.07	F	0.63	B	0.96	E	-0.07	-0.11
54. Orchard Village & Wiley Cyn	1.06	F	1.42	F	0.98	E[1]	1.27	F[1]	-0.08	-0.15
55. Orchard Village & McBean	0.90	D	1.20	F	0.91	E[1]	1.18	F[1]	-0.01	-0.02
57. Valencia & Magic Mountain	1.10	F	1.24	F	0.93	E	1.12	F	-0.17	-0.12
66. Bouquet & Newhall Ranch[2]	0.9~~39~~	E	~~1.14~~ .95	E~~F~~	0.9~~35~~	E	0.8~~97~~	D	- 0.0~~4~~	-0.08 ~~17~~

Intersection Level of Service Performance Criteria is LOS D, unless otherwise noted.
[1]LOS E is the Level of Service Performance Criteria for this location. See AFA Traffic Impact Study, Section 1.6, Reference 6.
[2] See *Mission Village - Responses to Comments Analysis*, AFA (April 29, 2011), **Final EIR, Appendix F4.5**.
Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F
Source: Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010), ***Appendix 4.5***

Table 4.5-26
ICU and LOS Summary – Existing plus Ambient plus Project With Mitigation
(Condominium Scenario)

Intersection	Existing plus Ambient without Project				Existing plus Ambient plus Project (Condo Scenario) with Mitigation				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.86	D	0.50	A	0.84	D	0.55	A	-0.02	0.05
9. The Old Road & I-5 SB Ramps	0.88	D	1.11	F	0.88	D	1.06	F	0.00	-0.05
10. I-5 SB Ramps & Magic Mountain Parkway	0.43	A	0.44	A	0.52	A	0.49	A	0.09	0.05
12. I-5 SB Ramps & Valencia Boulevard	0.62	B	0.55	A	0.68	B	0.59	A	0.06	0.04
14. I-5 SB Ramps & McBean Parkway	0.45	A	0.58	A	0.46	A	0.60	A	0.01	0.02
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.69	B	0.73	C	0.69	B	0.74	C	0.00	0.01
County Arterial Intersections										
25. The Old Road & Rye Canyon	0.74	C	0.79	C	0.66	B	0.79	C	-0.08	0.00
26. The Old Road & Magic Mountain Parkway	0.32	A	0.38	A	0.49	A	0.43	A	0.17	0.05
27. The Old Road & Valencia Boulevard	0.80	C	0.53	A	0.82	D	0.59	A	0.02	0.06
28. The Old Road & McBean Parkway	0.70	B	0.92	E	0.67	B	0.91	E	-0.03	-0.01
29. The Old Road & Pico Canyon Road	0.75	C	0.84	D	0.75	C	0.84	D	0.00	0.00
94. Commerce Center Drive & SR-126	0.65	B	0.97	E	n/a (Grade Separated Intersection)					
105. Westridge Parkway & Valencia Boulevard	0.66	B	0.22	A	0.71	C	0.36	A	0.05	0.14
108. Stevenson Ranch Parkway & Pico Canyon Road	0.57	A	0.62	B	0.58	A	0.62	B	0.01	0.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.77	C	0.47	A	0.77	C	0.48	A	0.00	0.01

Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

Table 4.5-27
ICU and LOS Summary – Year 2021 Project Cumulative Conditions With Mitigation
(Condominium Scenario)

Intersection	2021 Cumulative without Project				2021 Cumulative with Project (Condo Scenario) with Mitigation				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.83	D	0.70	B	0.73	C	0.66	B	-0.10	-0.04
9. The Old Road & I-5 SB Ramps	0.81	D	1.06	F	0.82	D	1.06	F	0.01	0.00
10. I-5 SB Ramps & Magic Mountain Parkway	0.58	A	0.56	B	0.64	B	0.63	B	0.06	0.07
12. I-5 SB Ramps & Valencia Boulevard	0.72	C	0.81	D	0.62	B	0.67	B	-0.10	-0.14
14. I-5 SB Ramps & McBean Parkway	0.52	A	0.71	C	0.54	A	0.73	C	0.02	0.02
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.61	B	0.69	B	0.63	B	0.71	C	0.02	0.02
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & Henry Mayo Drive (SR-126)	0.59	A	0.59	A	0.61	B	0.62	B	0.02	0.03
11. I-5 NB Ramps & Magic Mountain Parkway	0.60	A	0.61	B	0.69	B	0.70	B	0.09	0.09
13. I-5 NB Ramps & Valencia Boulevard	0.67	B	0.62	B	0.68	B	0.64	B	0.01	0.02
15. I-5 NB Ramps & McBean Parkway	0.52	A	0.57	A	0.53	A	0.59	A	0.01	0.02
17. I-5 NB On/Off & Lyons Avenue	0.51	A	0.75	C	0.52	A	0.77	C	0.01	0.02
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.03	F	1.21	F	0.78	C	0.91	E	-0.25	-0.30
26. The Old Road & Magic Mountain Parkway	0.43	A	0.51	A	0.60	A	0.59	A	0.17	0.08
27. The Old Road & Valencia Boulevard	0.68	B	0.60	A	0.71	C	0.73	C	0.03	0.13
28. The Old Road & McBean Parkway	0.53	A	0.85	D	0.54	A	0.86	D	0.01	0.01
29. The Old Road & Pico Canyon Road	0.71	C	0.80	C	0.74	C	0.82	D	0.03	0.02
94. Commerce Center Drive & SR-126	1.04	F	1.17	F	n/a (Grade Separated Intersection)					
105. Westridge Parkway & Valencia Boulevard	0.53	A	0.38	A	0.58	A	0.52	A	0.05	0.14
108. Stevenson Ranch Parkway & Pico Canyon Road	0.60	A	0.55	A	0.60	A	0.56	A	0.00	0.01
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.57	A	0.46	A	0.57	A	0.46	A	0.00	0.00

Intersection	2021 Cumulative without Project				2021 Cumulative with Project (Condo Scenario) with Mitigation				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
City Arterial Intersections										
30. Avenue Stanford & Rye Canyon Road	0.57	A	0.66	B	0.60	A	0.68	B	0.03	0.02
33. Copper Hill Drive & Newhall Ranch Road	0.72	C	0.77	C	0.75	C	0.80	C	0.03	0.03
City Arterial Intersections										
35. Copper Hill Drive & Decoro Drive	0.63	B	0.63	B	0.65	B	0.64	B	0.02	0.01
36. Tourney Road & Valencia Boulevard	0.51	A	0.60	A	0.52	A	0.62	B	0.01	0.02
37. Tourney Road & Magic Mountain Parkway	0.52	A	0.56	A	0.56	A	0.62	B	0.04	0.06
44. McBean Parkway & Valencia Boulevard	0.70	B	0.83	D	0.70	B	0.84	D	0.00	0.01
45. McBean Parkway & Magic Mountain Parkway	0.71	C	0.92	E	0.75	C	0.92	E	0.04	0.00
48. McBean Parkway & Newhall Ranch Road	0.78	C	1.01	F	0.70	B	0.81	D	-0.08	-0.20
49. McBean Parkway & Decoro Drive	0.70	B	0.60	A	0.72	C	0.61	B	0.02	0.01
51. Wiley Canyon Road & Lyons Avenue	0.65	B	0.83	D	0.66	B	0.84	D	0.01	0.01
54. Orchard Village Road & Wiley Canyon Road	0.65	B	0.75	C	0.65	B	0.75	C	0.00	0.00
55. Orchard Village Road & McBean Parkway	0.65	B	0.83	D	0.64	B	0.80	C	-0.01	0.03
57. Valencia Boulevard & Magic Mountain Parkway	0.79	C	0.83	D	0.80	C	0.84	D	0.01	0.01
65. Bouquet Canyon Road & Soledad Canyon Road	0.79	C	0.91	E	0.80	C	0.91	E	0.01	0.00
66. Bouquet Canyon Road & Newhall Ranch Road	0.89	D	1.01	F	0.83	D	0.88	D	-0.06	-0.13

Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

Table 4.5-28
ICU and LOS Summary – Long-Range (2035) Project Cumulative Conditions With Mitigation (Condominium Scenario)

Intersection	2035 Cumulative without Project				2035 Cumulative with Project (Condo Scenario) with Mitigation				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
Freeway Ramp Intersections (County)										
7. I-5 SB Ramps & Henry Mayo Drive (SR-126)	0.96	E	0.96	E	0.83	D	0.90	D	-0.13	-0.06
9. The Old Road & I-5 SB Ramps	0.84	D	1.34	F	0.81	D	1.06	F	-0.03	-0.28
10. I-5 SB Ramps & Magic Mountain Parkway	0.82	D	0.88	D	0.76	C	0.82	D	-0.06	-0.06
12. I-5 SB Ramps & Valencia Boulevard	0.77	C	1.19	F	0.65	B	0.96	E	-0.12	-0.23
14. I-5 SB Ramps & McBean Parkway	0.72	C	0.94	E	0.62	B	0.84	D	-0.10	-0.10
16. I-5 SB/Marriott & Pico Canyon Road/Lyons Avenue	0.67	B	1.08	F	0.69	B	1.08	F	0.02	0.00
Freeway Ramp Intersections (City)										
8. I-5 NB Ramps & SR-126	0.59	A	0.69	B	0.60	A	0.71	C	0.01	0.02
11. I-5 NB Ramps & Magic Mountain	0.78	C	0.86	D	0.76	C	0.84	D	-0.02	-0.02
13. I-5 NB Ramps & Valencia	0.78	C	0.83	D	0.79	C	0.84	D	0.01	0.01
15. I-5 NB Ramps & McBean	0.60	A	0.67	B	0.62	B	0.69	B	0.02	0.02
17. I-5 NB On/Off & Lyons Ave	0.56	A	0.89	D	0.57	A	0.79	C	0.01	-0.10
County Arterial Intersections										
25. The Old Road & Rye Canyon	1.73	F	2.04	F	0.83	D[1]	0.89	D[1]	-0.90	-1.15
26. The Old Road & Magic Mountain Parkway	0.66	B	0.79	C	0.78	C	0.89	D	0.12	0.10
27. The Old Road & Valencia Boulevard	0.72	C	0.83	D	0.79	C[1]	0.89	D[1]	0.07	0.06
28. The Old Road & McBean Parkway	0.63	B	0.94	E	0.70	B	0.89	D	0.07	-0.05
29. The Old Road & Pico Canyon Road	0.89	D	0.96	E	0.91	E[1]	0.97	E[1]	0.02	0.01
94. Commerce Center Drive & SR-126	1.31	F	1.60	F	n/a (Grade Separated Intersection)					
105. Westridge Parkway & Valencia Boulevard	0.58	A	0.62	B	0.59	A	0.76	C	0.01	0.14
108. Stevenson Ranch Parkway & Pico Canyon Road	0.61	B	0.79	D	0.61	B	0.79	C	0.00	0.00
109. Stevenson Ranch Parkway & Poe Parkway/Chase	0.48	A	0.58	A	0.48	A	0.58	A	0.00	0.00

Intersection	2035 Cumulative without Project				2035 Cumulative with Project (Condo Scenario) with Mitigation				Increase	
	AM		PM		AM		PM			
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
City Arterial Intersections										
30. Stanford & Rye Canyon	0.55	A	0.77	C	0.57	A	0.78	C	0.02	0.01
33. Copper Hill & Newhall Ranch	0.78	C	0.84	D	0.81	D	0.87	D	0.03	0.03
35. Copper Hill & Decoro	0.70	B	0.80	C	0.72	C	0.81	D	0.02	0.01
36. Tourney & Valencia	0.67	B	0.87	D	0.68	B	0.88	D	0.01	0.01
37. Tourney & Magic Mountain	0.67	B	0.86	D	0.74	C	0.82	D	0.07	-0.04
44. McBean & Valencia	0.69	B	0.94	E	0.70	B	0.94	E	0.01	0.00
45. McBean & Magic Mountain	0.92	E	1.19	F	0.81	D[1]	1.06	F[1]	-0.11	-0.13
48. McBean & Newhall Ranch	0.81	D	1.11	F	0.83	D	0.89	D	0.02	-0.22
49. McBean & Decoro	0.65	B	0.66	B	0.65	B	0.66	B	0.00	0.00
51. Wiley Canyon & Lyons Cyn	0.70	B	1.07	F	0.63	B	0.96	E	-0.07	-0.11
54. Orchard Village & Wiley Cyn	1.06	F	1.42	F	0.98	E[1]	1.27	F[1]	-0.08	-0.15
55. Orchard Village & McBean	0.90	D	1.20	F	0.91	E[1]	1.18	F[1]	-0.01	-0.02
57. Valencia & Magic Mountain	1.10	F	1.24	F	0.93	E	1.12	F	-0.17	-0.12
65. Bouquet & Soledad	0.78	C	0.99	E	0.79	C	0.99	E	0.01	0.00
66. Bouquet & Newhall Ranch	0.99	E	1.14	F	0.95	E	0.97	E	-0.04	-0.17

Intersection Level of Service Performance Criteria is LOS D, unless noted otherwise.

[1] *LOS E is the Level of Service Performance Criteria for this location (Austin-Foust Associates, Inc., Traffic Impact Analysis (October 2010),* ***Appendix 4.5****).*

Level of service ranges: 0.00–0.60 = A 0.61–0.70 = B 0.71–0.80 = C 0.81–0.90 = D 0.91–1.00 = E Above 1.00 = F

4.6 NOISE

1. SUMMARY

Development of the Mission Village site would occur over an approximate 96-month period, and would involve clearing and grading of the ground surface, grading of approximately 29.5 million cubic yards of earthen material and up to 372,000 cubic yards for the Southern California Edison (SCE) substation in a balanced cut and fill operation, and the building of the proposed improvements. These activities would involve the temporary use of heavy equipment, smaller equipment, and motor vehicles, which generate both steady state and episodic noise. This noise would primarily affect the occupants of on-site residences and other noise-sensitive uses constructed in the earlier phases of the development, as well as residents of the off-site Westridge development, resulting in potentially significant impacts that would be mitigated to a level below significant. While this construction activity noise could be audible to occupants of Travel Village when construction activities would occur on the northwestern portion of the site, the increased noise levels would not exceed the applicable thresholds of significance and, therefore, would not result in significant impacts.

Daytime pile driving in the Santa Clara Riverbed, should it occur during the construction of the proposed Commerce Center Drive Bridge, would be audible to occupants of on-site uses constructed prior to the bridge, and to the occupants of Travel Village and nearby non-residential uses, including visitors and employees of Magic Mountain Theme Park. The potential range of significant noise impacts from this activity for sensitive receptors would be approximately 4,000 feet from the pile driving site for a period of approximately 9–12 months during the later phases of the construction, assuming no attenuation by terrain, structures, or vegetation. Noise-sensitive receptors proposed on the site within this 4,000-foot range could include persons that would reside in apartments, condominiums, and single-family residences constructed prior to the bridge. Off-site sensitive receptors within this 4,000-foot range would include occupants of the eastern half of Travel Village. ~~Although mitigation is proposed, s~~Should pile driving be necessary in connection with bridge construction, the ~~potentially significant~~ noise impacts attributable to pile driving would be significant without mitigation ~~and unavoidable~~. Mitigation is included that would require the project applicant to use pile drilling techniques or a hydrohammer or an equivalent method, which would result in substantially reduced noise levels, in those circumstances in which sensitive receptors are located within 4,000 feet of pile driving activities. With this mitigation, on site and off site pile driving impacts would be reduced to less than significant levels. Pile driving noise impacts on future residents of Landmark Village, should Landmark Village be constructed before the Commerce Center Drive Bridge, would be less than significant.

Although the piles would be driven into alluvial deposits, which tend to have a dampening effect on vibrations, vibration from the pile driving would result in potentially significant impacts to within 500 feet of pile driving activity ~~surrounding inhabitants and to those non-residential uses that may employ vibration-sensitive equipment~~. Mitigation is included that would reduce the identified impacts to a level below significant.

Because project construction activities could cause noise and vibration levels at nearby existing and future receptors to exceed the Noise Ordinance *standards, construction noise and vibration impacts are considered significant without mitigation.*

On-site grading would occur within 100 feet of Tract 45433 (Westridge) and Westridge Parkway would be extended from this tract through Mission Village where it would terminate on site at its intersection with Magic Mountain Parkway. Noise from nearby grading operations and construction of the Westridge Parkway extension would be clearly audible within Westridge and nearby residents of Westridge would be periodically exposed to temporary noise levels that could exceed the County's *Noise Ordinance* limits, which would be a significant impact. Building construction noise within Mission Village would not likely be audible in more easterly portions of Westridge or in Stevenson Ranch because of the distance between the construction and these developments, and because of intervening topography.

Construction of the proposed Commerce Center Drive Bridge may involve pile driving, which is considered a stationary noise source and subject to stationary construction equipment noise source standards of the County *Noise Ordinance* (i.e., 60 and 65 dB(A) for single and multi-family residences, respectively, daily from 7:00 AM to 8:00 PM except Sundays and legal holidays). Pile driving could generate noise levels of approximately 105 dB(A) at 50 feet, as well as ground borne vibration for a period of approximately 9 to 12 months during Phase 4 of the project construction. The bridge is likely to be constructed after residences have been occupied within Mission Village; therefore, noise from the pile driving would be audible at on-site uses constructed during the earlier phases of the project. Noise levels could exceed the County's *Noise Ordinance* for as much as 4,000 feet away from the source assuming no noise attenuation due to intervening terrain or structures. As previously noted, Travel Village is located approximately 1,000 feet from the nearest proposed graded area on the project site (the southern bridge abutment). ~~; It~~ However, the bridge itself is within 300 feet of Travel Village property line at its closest point (the bridge is located over 500 feet from habitable structures at Travel Village). Due to the proximity of Travel Village to the pile driving activities associated with the bridge construction, pile driving would be clearly audible at Travel Village and noise levels from the pile driving would exceed the County *Noise Ordinance* limitations at this location. Therefore, pile driving noise impacts, should they occur, would be significant for single and multi-family residences within a 4,000-foot radius for the duration of the pile driving unless mitigated. The Draft EIR identified these impacts as significant and unavoidable. No other off-site noise-sensitive land uses occur within this 4,000-foot radius.

At the request of the Regional Planning Commission, additional analysis and review has been conducted regarding available mitigation measures to reduce pile driving noise impacts to less than significant levels. The Draft EIR identified pile drilling as an alternate method of pile installation. Under this method, a hole is drilled into the ground down to the required elevations and concrete is then cast into the hole. Pile drilling generally produces noise levels approximately 10 to 15 decibels lower than pile driving. Thus, noise impacts related to pile drilling activities would be less than significant. The Draft EIR included a mitigation measure (MV 4.6-3) requiring that pile drilling (i.e., cast-

in-drilled-hole piles) be utilized in lieu of pile driving, though only to the extent feasible; the contingent nature of the mitigation measure resulted in a significant and unavoidable impact determination. Mitigation measure MV 4.6-3 has been revised to eliminate the feasibility contingency.

In addition to pile drilling, hydrohammer pile driving equipment also is available to reduce impacts to less than significant. Hydrohammers utilize an enclosed hydraulically driven hammer with noise reduction. Use of hydrohammer pile driving equipment would reduce noise levels to less than 80 dB(A) at 25 feet, 70 dB(A) at 80 feet, 65 dB(A) at 150 feet, and 60 dB(A) at 250 feet.[21] As there are no habitable structures located within 250 feet (i.e., within the 60dB(A) contour) of the planned pile driving activities, use of hydrohammer pile driving equipment would reduce potential impacts to a less than significant level. This Final EIR includes mitigation requiring use of cast-in-drilled-hole piles, hydrohammer pile driving, or an alternative method that would achieve equivalent noise level reductions, which would reduce potential impacts to a less than significant level.

Vibration of the ground would be perceptible during pile driving. The machinery used to drive the piles generates vibrations which would travel away from the source in a radial pattern. Transmission of vibrations from a pile-driving source may be annoying to occupants and damaging to nearby structures, and/or may interfere with the operation of sensitive instruments.

Typical pile depths for bridge foundations in the type of alluvium found in the Santa Clara River are on the order of approximately 150 feet and the influence distance from the source will be up to approximately 500 feet. It is expected that, for the duration of pile driving, the vibration threshold set forth in Section 12.08.560 of County's *Noise Ordinance* would be exceeded. This section states,

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21 IHC Merwede, *IHC Hydrohammer Pile Driving Equipment*, 2011. Support documentation is presented in Final EIR **Appendix F4.6**.

> *Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 inches/second over the range of 1 to 199 Hertz. (Ord. 11778 Section 2 [Art. 5 Section 501 (d)], 1978; Ord 11773 Section 2 [Art. 5 Section 501(s)], 1978.)*

Thus, in the event pile driving, rather than pile drilling, is utilized in the construction of the proposed Commerce Center Drive Bridge, ~~B~~because the vibration levels would likely exceed the County's *Noise Ordinance* within 500 feet of ~~the area surrounding~~ the pile driving activity, and because the bridge would be located within 300 feet of the Travel Village property line, the vibration resulting from the pile driving activities may be above the vibration perception threshold on a small portion (approximately 200 feet) of the Travel Village property. However, as previously noted, the bridge would be located over 500 feet from habitable structures at Travel Village and, therefore, there are no habitable structures located on the affected portion of Travel Village. Nonetheless, based on a strict reading of the County's Noise Ordinance, a potentially significant vibration impact would result at the identified portion of Travel Village if pile driving occurs within 500 feet of its boundary and unless mitigated. No on-site uses are proposed within 500 feet of the southern bridge abutment; therefore, no significant pile driving vibration impacts would occur within the project site. No other existing or proposed uses occur within 500 feet of the northern bridge abutment and pile driving vibration associated with construction of the northern abutment would be less than significant.

The Draft EIR identified the potential vibration-related impacts as significant and, ultimately, as unavoidable due to the contingent nature of mitigation measure MV 4.6-4, which provided that in the event uses in the vicinity were adversely affected by vibration, and to the extent feasible, appropriate steps are to be taken to reduce the vibration levels accordingly. Mitigation measure MV 4.6-4 has been revised to eliminate the conditional feasibility requirement and, as revised, would reduce any potential impacts to a level below significant.

No other sources of excessive ground-borne vibration are expected to occur as a result of the proposed project.

In order to reduce the potential impacts associated with construction activities, the County Department of Public Works, Construction Division typically limits construction activities to between the hours of 6:30 AM and 8:00 PM daily and prohibits work on Sundays and legal holidays. The County Department of Health Services has the authority to further restrict construction activities to between the hours of 7:00 AM and 7:00 PM and any time on Sundays or legal holidays if such noise would create a noise

disturbance across a residential or commercial real-property line.[22] These restrictions do not, however, necessarily mitigate construction noise that would be in excess of the *Noise Ordinance*. When the noise is projected to be in excess of the *Noise Ordinance*, further mitigation is required.

(2) Construction Equipment Transport Noise

Heavy-duty construction traffic is expected to access the site via Magic Mountain Parkway from the east. After the Commerce Center Drive Bridge is constructed, construction traffic would also access the site from Commerce Center Drive. No noise-sensitive receptors exist along Magic Mountain Parkway east of the project site; therefore, construction traffic along this roadway would not result in a significant noise impact. After Commerce Center Drive is constructed and construction traffic occurs on that roadway, the construction traffic would be audible to occupants of Travel Village. Heavy-duty trucks that would be used to move construction equipment onto the project site typically have a noise level of approximately

22 *County of Los Angeles Ordinance No. 11743*, section 12.08.440. Noise disturbance is not defined in the noise ordinance. The County Health Officer has the authority to define and determine the extent of a noise disturbance on a case-by-case basis.

(1) Construction Mitigation Measures

MV 4.6-1 The project applicant, or its designee, shall not undertake construction activities that can generate noise levels in excess of the County's *Noise Ordinance* on Sundays or legal holidays.

MV 4.6-2 When construction operations occur in close proximity to on- or off-site occupied residences, and if it is determined by County staff during routine construction site inspections that the construction equipment could generate a noise level at the residences that would be in excess of the *Noise Ordinance*, the project applicant, or its designee, shall implement appropriate additional noise reduction measures. These measures shall include, among other things, changing the location of stationary construction equipment, shutting off idling equipment, notifying residents in advance of construction work, and installing temporary acoustic barriers around stationary construction noise sources.

MV 4.6-3 ~~To the extent feasible,~~ In lieu of conventional pile driving, t~~T~~he project developer shall utilize cast-in-drilled-hole piles, or hydrohammer pile driving equipment with noise reduction, or an alternative methodology that would achieve equivalent noise level reductions, ~~in lieu of pile driving if residential units are constructed~~ in those circumstances in which pile-driving activities would occur within 4,000 feet of sensitive receptors ~~the Commerce Center Drive Bridge prior to any pile-driving activity~~.

Pile drilling is an alternate method of pile installation where a hole is drilled into the ground up to the required elevations and concrete is then cast into it. The estimated noise level of pile drilling at 50 feet is 80 to 95 dB(A) L_{eq} compared to 90 to 105 dB(A) L_{eq} of conventional pile driving.[33] Therefore, pile drilling generally produces noise levels approximately 10 to 15 decibels lower than pile driving.

Hydrohammer pile driving equipment uses an enclosed hydraulically driven hammer with noise reduction. Noise can be reduced to less than 80 dB(A) at 25 feet, 70 dB(A) at 80 feet, 65 dB(A) at 150 feet, and 60 dB(A) at 250 feet.[34]

MV 4.6-4 If pile driving is ~~necessary~~ utilized for the Commerce Center Drive Bridge construction consistent with the limitations imposed by Mitigation Measure MV 4.6-3, the project applicant shall, to the extent ~~feasible~~necessary, reduce the level of vibration impact by:

- identifying all uses in the vicinity, if any, at which the vibration perception threshold may exceed permissible County limits identified in Section 12.08.560 of the County's *Noise Ordinance* ~~that may be adversely affected by the vibrations, including Travel Village, residences built in earlier phases of Mission Village, non-residential land uses that may use vibration-sensitive equipment, etc.~~; and

- installing seismographs at the aforementioned sensitive locations, if any, to ensure that Section 12.08.560 of the County's *Noise Ordinance* is not exceeded, and/or that the

33 U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.

34 IHC Merwede, *IHC Hydrohammer Pile Driving Equipment*, 2011.

pile driving would not cause structural damage or adversely affect vibration-sensitive equipment; and

- if the seismographs determine the permissible perception threshold is exceeded at any of the uses, adjusting vibration amplitudes of the pile driving on the conditions of the affected structures, the sensitivity of equipment, and/or human tolerance to reduce the vibration level to permissible limits.

(2) Operational Mitigation Measures

MV 4.6-5 To mitigate the noise impacts on Lots 561, 562, 563 and 564 ~~85, 86, and 87~~ (Area A2) (single-family residential) that back onto Commerce Center Drive from traffic on the proposed Commerce Center Drive extension through the site, the project applicant shall, prior to occupancy, construct a 5-foot solid wall along the rear lot lines of these lots. The wall may be constructed of 3/8 or 5/8-inch Plexiglas or other material of similar acoustic performance, and shall be continuous with no breaks or gaps.

~~MV 4.6-6 To mitigate the noise impacts on Lot 468 (Area D1) (apartment/condominium) from traffic on the proposed Commerce Center Drive extension through the site, the project applicant shall, prior to occupancy, construct a 5-foot berm/solid wall along the property line that abuts Commerce Center Drive. Alternatively, the project applicant shall place planned frequent use areas in the interior of the lot and separated from the roadway by structures.~~ Draft EIR Mitigation Measure MV 4.6-6 applied to Lot 468, which previously was designated for apartment/condominium use. When VTTM No. 61105 was revised December 15, 2010, the spineflower preserves were expanded to include Lot 468. Therefore, as Lot 468 no longer includes sensitive receptors and would not be signficantly impacted by project noise, Mitigation Measure MV 4.6-6 is no longer necesary.

MV 4.6-7 To mitigate the noise impacts on Lot 508 (Mixed Use Commercial) from traffic on the proposed Commerce Center Drive extension through the site, the project applicant shall place planned frequent use areas for the residential component, if any, in the interior of the lot and separated from the roadway by structures. Alternatively, if residential uses are proposed, the project applicant shall construct a 5-foot berm/solid wall along the property line that abuts Commerce Center Drive.

MV 4.6-8 To mitigate the noise impacts on Lot 512 (Mixed Use Residential/Commercial) from traffic on the proposed Magic Mountian Parkway extension through the site, the project applicant shall place planned frequent use areas for the residential component in the interior of the lot and separated from the roadway by structures. Alternatively, the project applicant shall construct a 5-foot berm/solid wall along the property line that abuts Commerce Center Drive.

With implementation of **Mitigation Measure MV 4.6-5**, noise impacts on Lots 561, 562, 563 and 564 ~~85, 86, and 87~~ would be reduced to 60 dB(A) CNEL or less, ~~and with implementation of **Mitigation Measure MV 4.6-6** noise impacts on Lot 468 would be reduced to 65 dB(A) CNEL or less with the 5-foot wall in place,~~ and less than significant. Because sound walls for commercial uses are not practical or desirable, noise levels on some of the lots designated for Mixed-Use Residential/Commercial (such as Lot 512) would exceed 65 dB(A) CNEL, which is the maximum acceptable exterior noise level for frequent use areas at multi-family residences. Therefore, the following mitigation measure is recommended to reduce on-site operational noise impacts on multi-family residences that could occur in Mixed-Use lots to less than significant.

MV 4.6-9 When the final plans for the Mixed-use Residential/Commercial lots are complete showing the locations and orientations of the residences within the lots are complete, acoustic analyses shall be conducted by a qualified acoustic consultant to ensure that interior noise levels of any residences within the commercial lots can be feasibly reduced to 45 dB(A).

Although the Mission Village project would not cause significant cumulative noise impacts in Ventura County, Mission Village is required to mitigate noise impacts on specific sensitive receptors in Ventura County under Specific Plan Mitigation Measures 4.9-15 and 4.9-16 through payment of its fair share towards specified noise attenuation measures and programs. Assuming that all future development projects that generate traffic along roadways adjacent to these receptors are required by Ventura County to implement similar mitigation measures, cumulative traffic noise impacts at these receptors would be reduced to less than significant.

10. CUMULATIVE MITIGATION MEASURES

Mitigation for cumulative noise impacts on Travel Village is provided in the Newhall Ranch Specific Plan Program EIR under Mitigation Measure 4.9-14**.** Additionally, the project's incremental contribution to cumulative traffic noise impacts in Ventura County would be mitigated through implementation of the previously adopted Mitigation Measures 4.9-15 and 4.9-16 from the Program EIR. No other cumulative mitigation measures are required.

11. UNAVOIDABLE SIGNIFICANT IMPACTS

a. Project Impacts

Mitigation measures recommended to reduce construction- and operational-related noise impacts would reduce the ~~magnitude of those~~ identified impacts to a level below significant and no significant and unavoidable impacts would result. Specific to pile-driving related impacts, the use of pile drilling or hydrohammer pile driving equipment or an equivalent methodology would reduce on-site and off-site pile driving noise impacts to less than significant levels, and mitigation would reduce related potential vibration impacts to a level below significant. ~~; however, should pile driving be required to construct the Commerce Center Drive Bridge, and should the project applicant not find it feasible to complete the pile driving prior to occupancy of on site noise sensitive uses within 4,000 feet of the pile driving, an unavoidable significant construction noise impact would occur. Additionally, although mitigation is proposed to reduce pile driving noise impacts at off site noise sensitive uses, should pile driving be required to construct the Commerce Center Drive Bridge, noise impacts from the pile driving would be significant and unavoidable at the Travel Village RV Park and all other off site noise sensitive uses located within 4,000 feet of the pile driving for the duration of the pile driving activities~~.

~~Vibration impacts within 500 feet of the pile driving may not be fully mitigable to or below the threshold of significance and would result in an unavoidable significant vibration impact to surrounding inhabitants and to those non residential uses that may employ vibration sensitive equipment for the duration of the pile driving.~~

b. Cumulative Impacts

The proposed project would not result in significant and unavoidable cumulative noise impacts.

Specific Plan, including the identification of appropriate candidate land areas for recharge. The report shall be subject to approval by the Department of Public Works (DPW) and other applicable regulatory agencies, as determined by DPW. (The referenced report has been completed and included in **Appendix 4.8**.)

c. Additional Mitigation Measures Proposed by this EIR

~~Implementation of t~~The above Specific Plan mitigation measures are ~~as~~ part of the Mission Village project by virtue of the County's approval of the Newhall Ranch Specific Plan (May 27, 2003), and would mitigate impacts to water resources to less-than-significant levels. The above Specific Plan mitigation measures also will be incorporated into the County's Mitigation Monitoring Plan for the Mission Village project as applicable. Nonetheless, to ensure that the Mission Village project impacts to water resources remain less than significant, the following mitigation measure was included in the Draft EIR; such mitigation also will be included in the County's Mitigation Monitoring Plan for the Mission Village project to ensure enforcement of the measure: ~~As a result, no additional mitigation measures beyond those identified in the Newhall Ranch Specific Plan Program EIR are required or necessary, because the Mission Village project does not result in any significant water-related impacts after implementation of the above mitigation measures. However, at the request of CLWA, the following mitigation measure has been added to the EIR:~~

MV 4.8-1 Upon the issuance of building permits associated with each subdivision map allowing construction within the Mission Village site, the applicant shall pay Facility Capacity Fees to the Castaic Lake Water Agency (CLWA) in accordance with CLWA policies and procedures.

10. SIGNIFICANT UNAVOIDABLE IMPACTS

a. Project Impacts

With implementation of the Specific Plan mitigation measures, the proposed project would not result in or contribute to any significant unavoidable impacts on Santa Clarita Valley water resources. No further mitigation measures are required.

b. Cumulative Impacts

Because the proposed project is relying on local independent water supplies (i.e., local groundwater and recycled water from local water reclamation plants), the proposed Mission Village project does not result in or contribute to any significant unavoidable cumulative impacts on Santa Clarita Valley water supplies. Therefore, as stated above, cumulative mitigation measures are not required.

4.9 WASTEWATER DISPOSAL

1. SUMMARY

Construction-related wastewater disposal impacts would be less than significant, as portable, on-site sanitation facilities would be utilized during construction activities.

Once project construction is complete, the proposed Mission Village project would generate a worst-case average total of approximately 0.96~~1.13~~ million gallons per day (mgd) of wastewater. Of the total project wastewater generation, approximately 0.695~~884~~ mgd would be treated by the Newhall Ranch County Sanitation District (NRCSD) at the Newhall Ranch Water Reclamation Plant (WRP) once WRP construction is complete. Due to gravitational limitations, the remaining approximately 0.266~~41~~ mgd would be permanently treated at the Valencia WRP, subject to conditions specified in a Joint Sewerage Services Agreement to be executed between NRCSD and the Santa Clarita Valley Sanitation District (SCVSD). The treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. Until the development of the Newhall Ranch WRP is complete, there are three potential scenarios for the interim conveyance and treatment of the portion of wastewater generated by the Mission Village project that ultimately would be permanently treated at the Newhall Ranch WRP. The first scenario is to construct an initial phase of the Newhall Ranch WRP to serve the Mission Village project site, with buildout of the WRP occurring over time as demand for treatment increases. Under this scenario, the initial phase of the WRP would be designed and constructed to accommodate the project's predicted wastewater generation. The second scenario would temporarily direct all wastewater flows from the Mission Village project by pipeline across the Commerce Center Drive Bridge to the Valencia WRP until the first phase of the Newhall Ranch WRP is complete. The third scenario assumes that the Commerce Center Drive Bridge is not constructed until after occupancy of some of the land uses in the Mission Village project, and an interim pump station would be constructed that would direct wastewater to the existing Valencia WRP. Under both the second and third scenarios, wastewater from the Mission Village project would be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational. (Under an agreement with the SCVSD, the Valencia WRP could temporarily treat wastewater from Mission Village (and Landmark Village) until such time as the Newhall Ranch WRP is constructed and operational. Based on the County Sanitation Districts of Los Angeles County (CSDLAC) future wastewater generation estimates and the planned expansion of the Saugus and Valencia WRPs, the Valencia WRP would have sufficient capacity to temporarily accommodate the Mission Village project's total predicted wastewater generation of ~~1.13~~0.96 mgd. For these reasons, wastewater disposal impacts associated with Mission Village would be less than significant.

2. INTRODUCTION

a. Relationship of Project to Newhall Ranch Specific Plan Program EIR

Section 4.12 of the Newhall Ranch Specific Plan Program EIR identified and analyzed the existing conditions, potential impacts, and mitigation measures associated with wastewater disposal for the entire Newhall Ranch Specific Plan. The Newhall Ranch Specific Plan Program EIR concluded that Specific Plan implementation without mitigation would result in significant wastewater disposal impacts, but that construction of the Newhall Ranch WRP and associated waste transmission infrastructure, as well as implementation of the identified mitigation measures, would reduce the impacts to below a level of significance. All subsequent project-specific development plans and tentative subdivision maps must be consistent with the Newhall Ranch Specific Plan, adopted May 2003, the County of Los Angeles General Plan, and the Santa Clarita Valley Area Plan as they pertain to wastewater disposal, and applicable County regulations.

This project-level wastewater disposal impact analysis is tiered from the previously certified Newhall Ranch Specific Plan Program EIR. **Section 4.9** assesses the Mission Village project site's existing conditions relative to wastewater disposal, impacts on wastewater disposal, applicable mitigation measures from the Newhall Ranch Specific Plan Program EIR, and any additional mitigation measures recommended by this EIR for the Mission Village project.

3. SUMMARY OF THE NEWHALL RANCH SPECIFIC PLAN PROGRAM EIR FINDINGS

The approved Newhall Ranch WRP will be located within the Specific Plan area to treat Specific Plan-generated wastewater. The WRP site is located on the south side of State Route 126 (SR-126) adjoining the Santa Clara River, near the Los Angeles County/Ventura County line. Without construction of the Newhall Ranch WRP and associated waste transmission infrastructure, the increased demand for wastewater treatment associated with buildout of the Specific Plan is considered a significant impact.

Based on the Newhall Ranch Specific Plan Program EIR and record, the County's Board of Supervisors found that the significant wastewater disposal impacts caused by buildout of the Specific Plan were mitigated to below levels of significance with construction of the Newhall Ranch WRP, the associated waste transmission infrastructure and adoption of specified mitigation measures.[1]

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1 Mitigation Measures 4.12-1 through 4.12-7 in both the certified Newhall Ranch Specific Plan Program EIR and adopted Mitigation Monitoring Plan for the Specific Plan (May 2003). All of these mitigation measures are reiterated in the mitigation measures portion of this EIR.

The project-level wastewater/sewer plan is intended to be consistent with, and implement, the Specific Plan's approved Conceptual Backbone Sewer Plan (Exhibit 2.5-3 of the Specific Plan). This plan set forth a program-level system for wastewater/sewage collection for Newhall Ranch. The Specific Plan also committed that all sewer system facilities would be designed and constructed for maintenance by the County, CSDLAC, or a new County sanitation district in accordance with their manuals, criteria, and requirements. **Figure 1.0-24, Newhall Ranch Specific Plan Backbone Drainage Plan – Mission Village**, depicts the Specific Plan's Conceptual Backbone Sewer Plan, as it relates to Mission Village. In response to the approved Specific Plan, the Los Angeles County Local Area Formation Commission (LAFCO) has approved formation of the Newhall Ranch County Sanitation District, effective July 27, 2006.[2] The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd.

The environmental effects of constructing and operating the WRP were evaluated at the project-level in the certified Newhall Ranch Specific Plan Program EIR. The EIR determined the WRP would have significant unavoidable impacts on the following environmental categories: agricultural resources, air quality, visual quality, and solid waste. Agricultural impacts would result from the conversion of 15 acres of prime agricultural land to an urban use. Air quality impacts associated with site grading would generate quantities of dust exceeding the South Coast Air Quality Management District (SCAQMD) daily threshold of significance, even after application of all available dust controls to reduce the amount of dust by roughly 61 percent. Visual quality impacts were due to the contrast of the WRP site with the vacant land within the river corridor, both during and following construction. Solid waste impacts were a result of project landfill disposal of biosolids produced as a byproduct of the wastewater treatment process. Because such facilities are limited in number and have finite capacity, and because new facilities are expensive and difficult to develop impacts to solid waste are considered significant and unavoidable. Based on the Newhall Ranch Specific Plan Final EIR for the WRP and record, the County's Board of Supervisors found that the significant unavoidable impacts caused by the WRP were offset by overriding economic, legal, social, and public benefits. Consistent with section 15093 of the *California Environmental Quality Act (CEQA) Guidelines*, these benefits were found to outweigh the significant unavoidable impacts and make them acceptable.

4. EXISTING CONDITIONS

Relevant information and the technical studies from the certified Newhall Ranch Specific Plan Program EIR (see Draft EIR, Appendix 4.12) were assessed to determine if there were any wastewater disposal issues that were not examined in the certified Program EIR. It was determined that all significant wastewater disposal effects were identified, adequately addressed and mitigated or avoided at the programmatic level of review in the certified Program EIR and related environmental findings. (*State CEQA Guidelines*, Section 15152). Therefore, at the project level, this EIR incorporates by reference the

2 CSDLAC comment letter to Daniel Fierros, Department of Regional Planning, dated January 22, 2007.

existing conditions analysis and background information relating to wastewater disposal from the certified Newhall Ranch Specific Plan Program EIR (Section 4.12). This information has been updated as appropriate.

This section is divided into two distinct topics:

- Wastewater treatment facilities
- Wastewater collection system

a. Wastewater Treatment Facilities

Most wastewater generated within the Santa Clarita Valley is treated at two existing WRPs, which are operated by the Santa Clarita Valley Sanitation District (SCVSD). The SCVSD is a member of the CSDLAC and is the wastewater provider for the City of Santa Clarita and some surrounding unincorporated County areas. The existing Saugus WRP is located at 26200 Springbrook Avenue in Saugus. The existing Valencia WRP is located at 28185 The Old Road in Valencia. **Figure 4.9-1**, **Existing Wastewater Treatment Facilities and Sanitation Districts**, shows the existing wastewater facilities and Sanitation Districts within the immediate vicinity of the project site that provide primary, secondary, and tertiary treatment. The SCVSD has a permitted treatment capacity of 28.1 mgd and a treated average of 20.5 mgd.[3] While a small portion of the Newhall Ranch Specific Plan site is within the Sphere of Influence of the SCVSD, virtually the entire Specific Plan site is outside the service area of the SCVSD. Currently, wastewater generated by the few existing buildings located on the Newhall Ranch Specific Plan site is accommodated by on-site septic systems. No wastewater is currently generated from the Mission Village project site.

The mechanism used to fund expansion projects is the SCVSD's Connection Fee Program. Prior to the connection of the local sewer network to the CSDLAC system, all new users are required to pay for their fair share[4] of the SCVSD sewerage system expansion through a "connection fee." The fees fund treatment capacity expansion and trunk lines, while on-site sewer mains are the responsibility of the developer.

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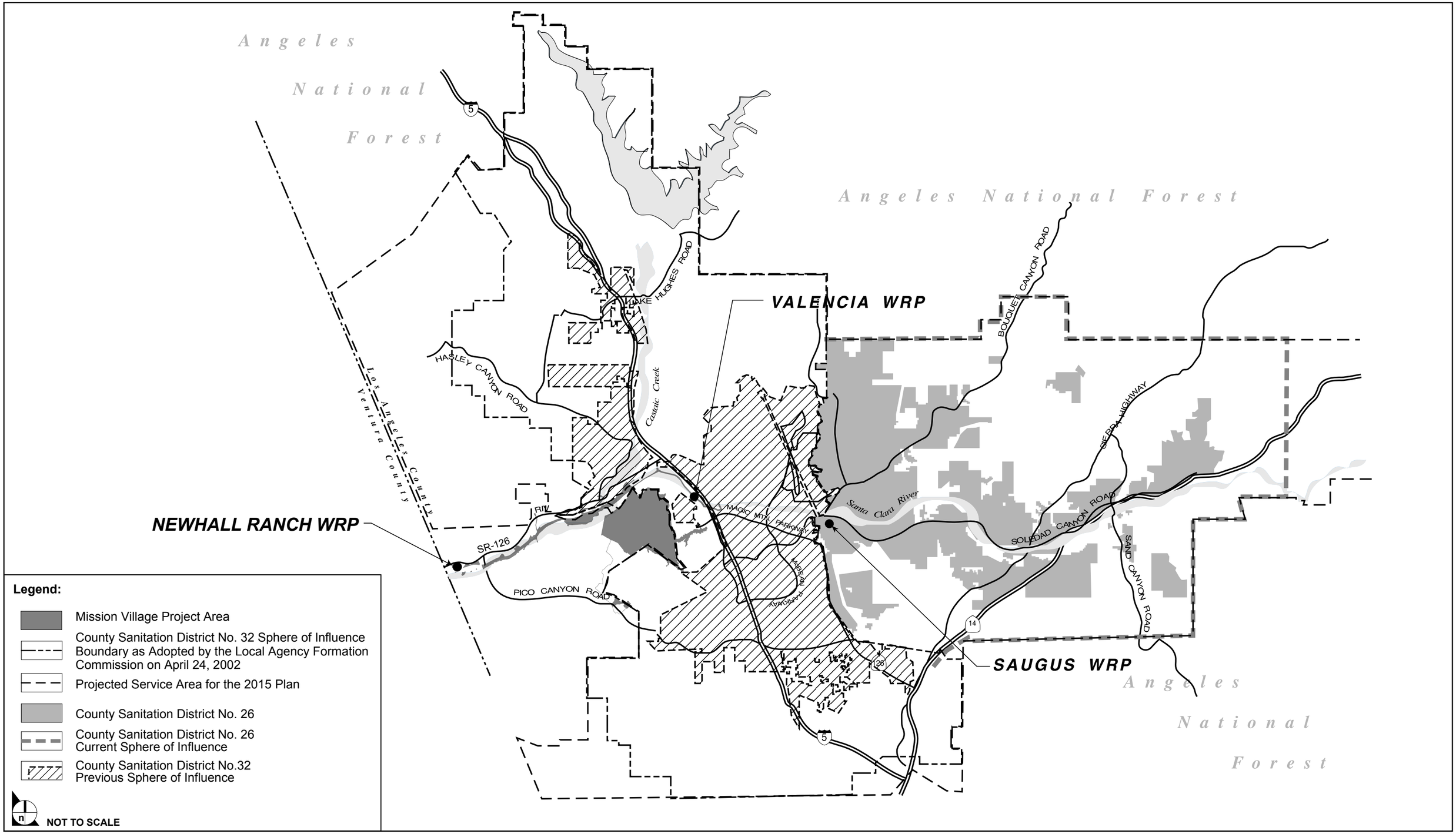
3 County Sanitation Districts of Los Angeles County. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.

4 The fair share is equivalent to the cost of expanding the system to accommodate the anticipated sewage flows from the new users.



SOURCE: Impact Sciences, Inc., 2003

FIGURE **4.9-1**

Existing Wastewater Treatment Facilities and Sanitation Districts

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The rate at which connections are made—and revenues accumulate—drives the rate at which periodic expansions of the system will be designed and built. Importantly, it should be noted that connection permits are not issued if there is not sufficient capacity, although this is a rare occurrence as the SCVSD routinely monitors system capacity and anticipated development to ensure sufficient capacity for approved developments. Therefore, the expansion of district facilities, such as trunk lines, may not be immediate if adequate treatment capacity does not exist at the WRP to serve new users, or the expansion may occur in the future if it is determined that there is adequate WRP capacity to serve immediately new users, but inadequate capacity to serve future development within the tributary area(s) of the affected collection/treatment facilities, thereby necessitating future system expansions. In the latter case, the connection fees paid by new users are deposited into a restricted Capital Improvement Fund (CIF) used solely to capitalize the future expansion of affected system facilities.

As stated above, connection permits are only issued if there is sufficient collection and treatment capacity; however, SCVSD routinely monitors system capacity and anticipated development to ensure sufficient capacity for approved developments. Consequently, SCVSD's denial of a connection permit is extremely rare, because expansions are constructed when capacity is needed, not when a threshold amount of connection revenues has been collected. SCVSD anticipates that the new NRCSD would adopt similar connection permit practices.

The cyclical process of building phased expansions and collecting connection fees can continue indefinitely. The only restriction would be when the districts run out of land. Existing facilities can be expanded to handle a daily capacity of 34.2 mgd, which is sufficient to meet demand up until 20~~15~~33.[5] The district does not expect to exceed a daily capacity of 34.2 mgd because connection permits will not be issued that would exceed this amount.

CSDLAC has prepared a Facilities Plan, with a horizon year of 2015, for the SCVSD. The Facilities Plan, approved in January 1998, estimates future wastewater generation for the probable future service area of the SCVSD in order to anticipate future treatment capacity and wastewater conveyance needs. According to CSDLAC estimates, total flows projected from the Santa Clarita Valley in 2015, exclusive of Newhall Ranch, would be 34.2 mgd. This projection is based on Southern California Association of Governments (SCAG) 1996 population projections. As a result of this finding, CSDLAC proposed a phased plan to incrementally expand the treatment facilities at the Saugus and Valencia WRPs to meet future needs to a total of 34.2 mgd.[6] This phased expansion plan, which would increase treatment capacity by

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5 ~~County Sanitation Districts of Los Angeles County. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998~~CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.

6 County Sanitation Districts. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.

approximately 15 mgd, has been approved. The most recent phase was completed in May 2005 and expanded treatment capacity by approximately 9 mgd, or approximately 47 percent, to the current total treatment capacity of approximately 28.1 mgd. Based on populations projections published in the most recent SCAG 2004~~8~~ Regional Transportation Plan, the Valencia WRP has adequate capacity through the year 201~~5~~33. ~~Another phase (Stage VI) of treatment facility expansion would increase capacity by 6 mgd, but will not be constructed until flow materializes.~~[7]

According to recent SCVSD flow projections based on SCAG's 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033.

b. Wastewater Collection System

The CSDLAC wastewater collection system is composed of service connections that tie in to the local collection network. This local network, composed of secondary and primary collectors, flows into the districts' trunk wastewater mains and the water reclamation plants. The Newhall Ranch Consolidated Sewer District (NRCSD) maintains the wastewater trunk mains that lead to the Saugus and Valencia WRPs, and the local collection network is maintained by the Los Angeles County Department of Public Works' Consolidated Sewer Maintenance District ~~for the City of Santa Clarita (~~CSMD~~)~~.

The Mission Village project site is presently undeveloped and there is no wastewater collection and conveyance system on the property. Existing gravity sewer mains run parallel to The Old Road within the right-of-way and flow to a sewer lift station located near the intersection of The Old Road and Henry Mayo Drive at the east side of The Old Road right-of-way. The existing lift station pumps wastewater through a 16-inch force main to the Valencia WRP. **See Figure 4.9-1.**

Operation and maintenance of local sewer lines within areas of unincorporated Los Angeles County, and the City of Santa Clarita, are the responsibility of the ~~Consolidated Sewer Maintenance District of the Los Angeles County Department of Public Works~~CSMD. The ~~Consolidated Sewer Maintenance District~~CSMD requires that new subdivision wastewater systems connect to the District's existing sanitary wastewater system, and any developer constructing a new wastewater line coordinate the construction and dedication of any such wastewater line with the District for future operation and maintenance. Operation and maintenance of the regional trunk sewer lines is the responsibility of the ~~NRCSD~~Newhall Ranch Consolidated Sewer District. It would then be the responsibility of ~~the NRCSD~~ this district to upgrade the

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7 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.~~County Sanitation Districts. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.~~

wastewater collection and treatment systems by providing relief for existing trunk lines nearing capacity and expanding treatment plants to provide sanitation service to outlying areas.[8]

5. PROPOSED PROJECT IMPROVEMENTS

The project proposes to develop a total of 4,412 residential dwelling units consisting of 382 single-family homes and 4,030 multi-family units, including attached and detached condominiums, age qualified, and apartment units, with a total residential population of 10,802.[9] The project would also include 1.555 million square feet of commercial/mixed-uses, a 9.5-acre elementary school, fire station, public library, bus transfer station, parks, public and private recreational facilities, trails, and road improvements.

The project-level wastewater/sewer collection system consists of gravity sewers, forced mains, and pump stations. As noted, the long-range plan is for the Newhall Ranch WRP to be constructed exclusively to serve uses within Newhall Ranch. The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd. LAFCO approved formation of the Newhall Ranch County Sanitation District, effective July 27, 2006. The environmental effects of constructing and operating the WRP were evaluated at the project-level in the certified Newhall Ranch Program EIR.

Until the previously approved Newhall Ranch WRP is constructed and operational, one of several alternative wastewater treatment options will be implemented for the Mission Village project. These alternative treatment options are described below in **subsection 6, Project Impacts**, along with the potential impacts associated with implementation of each option.

As stated above, the NRCSD will provide wastewater services for the Newhall Ranch Specific Plan, including the Mission Village project site. The SCVSD is a member of the County Sanitation Districts of Los Angeles County and is the wastewater service provider for the City of Santa Clarita and some surrounding unincorporated County areas. To coordinate wastewater management services between the SCVSD and the NRCSD, an Interconnection Agreement was signed in 2002 between the SCVSD and the project applicant.

The Interconnection Agreement was developed to establish a logical plan for the development and administration of the new NRCSD and its infrastructure, and it sets conditions under which the first 6,000 homes in Newhall Ranch may temporarily discharge wastewater to the existing Valencia WRP. The

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8 Telephone conversation with Basil Hewitt at the County Sanitation Districts of Los Angeles County, September 1, 2005.

9 Based upon County of Los Angeles estimates of 3.17 persons per single-family household and 2.38 persons per multi-family houeshold.

conditions include payment of the standard connection fee (fair share of the cost of the existing infrastructure) and transfer of title of the 22-acre Newhall Ranch WRP site to the NRCSD. Newhall Ranch residents also would pay the Districts an annual service charge to recover the full cost of treating their wastewater at the Valencia WRP. Temporary treatment of wastewater at the Valencia WRP would not eliminate the need for the developer to construct the Newhall Ranch WRP; instead, the temporary treatment of wastewater at the existing Valencia WRP is a practical engineering decision based on the need to build up an adequate, steady flow of wastewater before starting up the Newhall Ranch WRP. Such an approach would match the slower pace of the development, but would not eliminate the Specific Plan requirement for construction of the Newhall Ranch WRP.

The Interconnection Agreement was considered and approved at the January 9, 2002 meetings of the CSDLAC, which were open to the public. Further, the Interconnection Agreement was referenced in previous County and LAFCO resolutions supporting formation of the new NRCSD. A copy of the Interconnection Agreement is found in **Appendix F4.9** of the Final EIR.[10]

6. PROJECT IMPACTS

The analysis of potential impacts to wastewater disposal associated with construction and operation of the proposed Mission Village project, including the significance criteria applicable to assessing such impacts, is presented below:

a. Significance Threshold Criteria

According to Appendix G of the *State CEQA Guidelines*, a project would result in a significant wastewater disposal impact if the project would

(a) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or

(b) require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(c) result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

With respect to criterion (a), the proposed project will comply with all applicable wastewater treatment requirements, including obtaining all necessary permits. Please see **Section 4.8, Water Service**, for further

[10] To the extent required, the SCVSD may utilize the Mission Village EIR or the Landmark Village EIR, as necessary, if one of the above Valencia WRP sewer options is selected and one or both of the project EIRs are certified by the County's Board of Supervisors.

discussion. As to criterion (b), the proposed project will not require the construction of new, or the expansion of existing, wastewater treatment facilities, beyond the Newhall Ranch WRP, the environmental impacts of which, as previously noted, were analyzed in the Newhall Ranch Specific Plan/WRP EIR. Therefore, the focus of the following impact analysis is on criterion (c) and the available treatment capacity to serve the project's projected wastewater demand.

b. Construction-Related Impact Analysis

Construction contractors for the project would provide portable, on-site sanitation facilities that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated is not expected to have a significant impact on these disposal/treatment facilities due to expected low volume and temporary nature of the waste generated during construction.

c. Operational Impacts

(1) Demand

As shown in **Table 4.9-1, Mission Village Wastewater Generation**, the proposed project would generate a worst-case average total of approximately 0.~~884~~ 695 mgd of wastewater that would be treated by the NRCSD at the Newhall Ranch WRP, and 0.266~~41~~ mgd that would be permanently treated at the Valencia WRP, subject to conditions specified in a Joint Sewerage Services Agreement to be executed between NRCSD and the SCVSD. Flows from the project site would be lifted and combined for conveyance across the River and collection into a Sanitation District trunk sewer located along the north side of the River. This trunk will either convey the effluent by gravity to the Newhall Ranch WRP or be pumped back to the Valencia WRP under the Interconnection agreement with SCVSD. Flows from a portion of the project site that is the proposed location of 1,239 multi-family units (Sewer System C) and approximately 732,000 square feet of commercial naturally drain towards the current sewer line terminus in Magic Mountain Parkway. Flows from this portion of the project site are proposed to connect to the sewer lines in Magic Mountain Parkway for treatment at the Valencia WRP.

Table 4.9-1
Mission Village Wastewater Generation

Land Use	Units	Quantity	Generation Factor (gpd per designated unit)	Wastewater Generation (gpd)
Treatment at Newhall Ranch WRP (Ultimate Condition)				
Residential				
Single Family	du	382	260.00	99,320
Multi-Family	du	2,791	156~~195~~.00	435,396~~544,245~~
Non-Residential				
Commercial Retail	tsf	823.43~~1,555.1~~	100.00	82,343~~155,510~~
Elementary School	tsf	~~413.82~~375	200.00	75,000~~82,764~~
Library	tsf	60	50.00	3,000
			Subtotal	*695,059~~884,839~~*
Treatment at Valencia WRP (Ultimate Condition)				
Multi-Family	du	1,239	15~~6~~95.00	193,284~~241,605~~
Non-Residential				
Commercial Retail	Tsf	732.57	100	73,257
			Subtotal	*266,541~~41,605~~*
			Total	**961,600~~1,126,444~~**

Source: County Sanitation Districts of Los Angeles Loadings and Unit Rates.
du = dwelling units; tsf = thousand square feet

(2) Wastewater Treatment

As previously discussed, the long-range plan is for the Newhall Ranch WRP to be constructed exclusively to serve uses within Newhall Ranch. The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd. A new County sanitation district has been formed and is known as the Newhall Ranch County Sanitation District or NRCSD. Project generated wastewater, 0.695~~884~~ mgd, would be treated by the NRCSD at the Newhall Ranch WRP, although interim treatment at the Valencia WRP would occur under some of the wastewater treatment scenarios as described below. Project generated wastewater of approximately 0.266~~41~~ mgd would be treated at the Valencia WRP permanently. As the planned treatment capacity of the Newhall Ranch WRP would be sufficient to treat wastewater flows from the entire Specific Plan project, no significant long-term operational impacts would result from the treatment of wastewater generated by the Mission Village project.

~~However, u~~Until the Newhall Ranch WRP construction is completed and the plant is operational, on an interim basis, three wastewater disposal options are available to treat the majority of the wastewater

generated by the proposed project. One scenario, as shown in **Figure 1.0-32, Mission Village Wastewater System – Scenario 1**, provides for the construction of an initial phase of the Newhall Ranch WRP to serve the Mission Village ~~subdivision~~project. Under this scenario, buildout of the WRP would occur over time as demand for treatment increases due to subsequent development of the Newhall Ranch Specific Plan. The second scenario, as shown in **Figure 1.0-33, Mission Village Wastewater System – Scenario 2**, provides for an option should the Newhall Ranch WRP not yet be constructed. In this scenario, flows would be piped across the Commerce Center Drive Bridge to an interim pump station north of the Santa Clara River along the utility corridor where wastewater would be pumped back to an existing CSDLAC pump station, then to the existing Valencia WRP, located upstream of the project site along I-5. The pump station would be used until such time as the first phase of the Newhall Ranch WRP is constructed~~.~~ and operational. The third scenario, as shown in **Figure 1.0-34, Mission Village Wastewater System – Scenario 3**, is an interim option that would be implemented in the event that the Commerce Center Drive Bridge is not constructed prior to the occupancy of new land uses on the Mission Village project site. Under this scenario, an interim pump station would be constructed near the intersection of "GG" Street and Commerce Center Drive that would pump effluent to the existing Valencia WRP, which is located approximately 0.5 mile east of the project site along I-5. Under this scenario, a force main from the interim pump station on the project site to the proposed sewer mainline in Magic Mountain Parkway would be constructed. This proposed sewer mainline would connect with an existing line at the intersection of The Old Road and Magic Mountain Parkway. As with Scenario 2 described above, wastewater from the Mission Village project would continue to be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational, consistent with the Interconnection Agreement. The available capacity under each of these three treatment scenarios is discussed below.

(a) Treatment Scenario 1

Project generated wastewater requiring treatment has been calculated at approximately ~~1.13~~0.96 mgd. At buildout, the treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. The Newhall Ranch WRP has been designed to serve the buildout of the Newhall Ranch Specific Plan area, of which Mission Village is a part. Under this treatment scenario, the first phase of the WRP would be sufficiently sized to accommodate wastewater from the Mission Village project. The WRP was conditioned by the Board of Supervisors to be designed and constructed to the standards of CSDLAC and state standards and requirements. In addition, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility. As a result, no significant operational impacts would occur under this scenario.

(b) Treatment Scenario 2

Under this scenario, an interim pump station would be constructed along the utility corridor to pump wastewater via pipeline to the Valencia WRP. As a result of CSDLAC future wastewater generation estimates, CSDLAC proposed a two-phase plan to expand the SCVSD treatment facilities, which include the Valencia WRP, to meet anticipated future wastewater disposal needs of 34.~~1~~2 mgd.[11] The most recent phase was completed in May 2005 and expanded treatment capacity by approximately 9 mgd, or approximately 47 percent, to the current total treatment capacity of approximately 28.1 mgd. Based on population projections ~~published in~~ from the SCAG ~~2004~~ Regional Transportation Plan, 2008, the previously approved Stage VI expansion of the Valencia WRP is not expected to be needed until approximately 2021 and the site build-out capacity of 34.2 mgd is not expected to be reached until 2033.[12] ~~has adequate capacity through the year 2015. Another phase (Stage VI) expansion would increase capacity by 6 mgd, but will not be constructed until flow materializes.[13] According to recent SCVSD flow projections based on the SCAG 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033.~~ Consequently, the planned short-term use of the Valencia WRP to treat ~~1.13~~0.96 mgd of the project's wastewater is expected to have no impact on future expansion of the SCVSD facilities. In addition, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility.

Additionally, as stated earlier, numerous safeguards exist within the County's project approval process to ensure available treatment capacity, including, as noted above, that connection permits for new development are not issued if there is not sufficient capacity. Moreover, mitigation adopted by the County as part of its approval of the Specific Plan provides that prior to recordation of each subdivision permitting construction; the applicant is required to obtain a letter from the new County sanitation district stating that treatment capacity will be adequate for that subdivision (Mitigation Measure SP 4.12-4). As a result, no significant operational impacts would occur under this scenario.

(c) Treatment Scenario 3

Similar to Scenario 2, under this scenario wastewater from the Mission Village project would be conveyed to SCVSD and, as discussed immediately above, the planned short-term use of the Valencia WRP to treat the project's wastewater can be accommodated, as well as the permanent treatment of approximately

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11 Ibid.

12 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.

13 CSDLAC comment letter to Daniel Fierros, Los Angeles County Department of Regional Planning, dated January 22, 2007.

0.266 mgd of project wastewater. For this reason, no significant operational impacts would occur under this scenario.

(3) Collection Facilities

The following analysis is based on the Sewer Area Study for Mission Village prepared by PSOMAS in February 2010 For purposes of designing wastewater collection facilities compatible with local topography, the Mission Village project site was divided into five sewer systems designated as Systems A, B, B1, B2, and C, as shown in **Figure 4.9-2**, **Mission Village Sewer Systems**. In addition to Mission Village wastewater, wastewater flow from two off-site developments would be conveyed through the Mission Village system—the Legacy Village (VTTM 061996), and Homestead (VTTM 061996), located to the south, east, and west of the project site, respectively. Entrada (VTTM 53295) will tie into an off-site line in Magic Mountain Parkway that would be constructed by the Mission Village project.

Mission Village Sewer System "A" would combine a portion of the wastewater flow from the Legacy Village development and a portion of the Homestead project effluent with flow generated within this part of the Mission Village site by gravity flow to a pump station located near Lion Canyon. The wastewater would then be pumped to Mission Village Sewer System B2 and would flow, with effluent generated by uses within System "B2," to Commerce Center Drive where it would be combined with System "B." Mission Village Sewer Systems "B" and "B2" would convey wastewater flow via gravity, down Commerce Center Drive. This flow would be combined with that from System "B1".

System C drains naturally towards the current terminus in Magic Mountain Parkway. This system will be sewered through the extension of sewer lines in Magic Mountain Parkway, with a tie in to an existing trunk sewer in the Old Road that is connected to the Valencia WRP via an existing 30-inch siphon under the Santa Clara River adjacent to the Old Road Bridge.

If the first phase of the Newhall Ranch WRP is used to treat effluent generated by the proposed project, as described in Treatment Scenario 1, the wastewater described above would flow via gravity across the Commerce Center Drive Bridge to a connection with the Newhall Ranch Santa Clara River Interceptor located on the north side of the Santa Clara River and then on to the Newhall Ranch WRP.

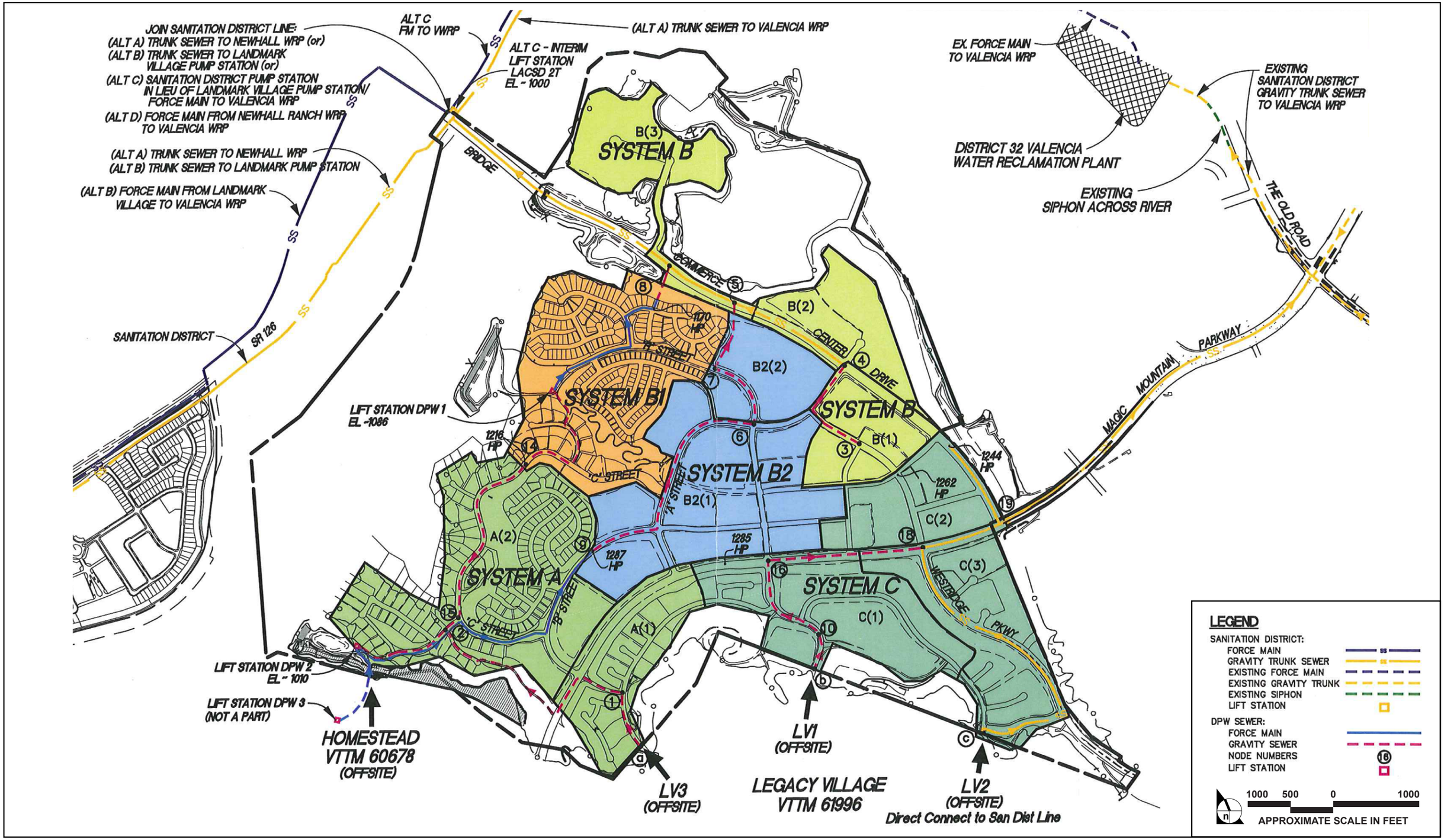
If the project follows Treatment Scenario 2, wastewater flows from Mission Village would be temporarily directed to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is ~~complete~~ constructed and operational. This alternative would require a temporary off-site Sanitation District lift station equipped with a force main to pump the effluent to an existing pump station at Henry Mayo/The Old Road intersection that pumps directly to the Valencia WRP. Under this scenario, if the Landmark Village project is developed prior to the Mission Village project, a gravity trunk main would be constructed along SR-126 from Commerce Center Drive to the temporary off-site lift station proposed as

part of Landmark Village. This lift station would pump effluent from both Mission Village and Landmark Village through a force main to the existing pump at the Henry Mayo Drive/The Old Road intersection and then on to the Valencia WRP.

Under Treatment Scenario 3, the Commerce Center Drive Bridge would not be constructed prior to occupancy of new land uses in Mission Village. This scenario would require the development and use of an interim pump station near the intersection of "GG" Street and Commerce Center Drive that would pump effluent to the existing Valencia WRP, which is located approximately 0.5 mile east of the project site along I-5. A pipeline from the interim pump station on the project site to the Valencia WRP would be constructed along the Magic Mountain Parkway Extension and would connect with an existing line at the intersection of The Old Road and Magic Mountain Parkway. As with Scenario 2 described above, wastewater from the Mission Village project would be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational.

Under Treatment Scenarios 1, 2, and 3, wastewater flows from Mission Village Sewer System C would be combined with a portion of Legacy Village effluent and wastewater generated from the Entrada development and drained via gravity flow through the sewer under Magic Mountain Parkway. This sewer would connect to an existing 30-inch trunk main that siphons under the Santa Clara River at The Old Road Bridge to the Valencia WRP.

All new lines would be designed and constructed to meet Los Angeles County Department of Public Works, CSDLAC, and state standards and requirements. Therefore, wastewater collection system impacts under any of the three scenarios are considered less than significant.



SOURCE: PSOMAS – February 2010

FIGURE **4.9-2**

Mission Village Sewer Systems

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7. MITIGATION MEASURES

The County previously adopted mitigation measures required to be implemented as part of the approved Newhall Ranch Specific Plan. These mitigation measures, as they relate to wastewater disposal, are found in the certified Newhall Ranch Specific Plan Program EIR and adopted Mitigation Monitoring Plan (May 2003). The project applicant has committed to implementing the applicable mitigation measures from the Newhall Ranch Specific Plan to ensure that future development of the project site would not result in wastewater disposal impacts and would not adversely affect adjacent properties.

a. Mitigation Measures Required by the Adopted Newhall Ranch Specific Plan, as Related to the Mission Village Project

The following mitigation measures (**Mitigation Measures SP 4.12-1** through **SP 4.12-7**, below) were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan (May 2003). The applicable mitigation measures will be implemented, or have been implemented already, to mitigate the potentially significant wastewater disposal impacts associated with the Specific Plan, including the proposed Mission Village project.

SP 4.12-1 The Specific Plan shall reserve a site of sufficient size to accommodate a water reclamation plant to serve the Newhall Ranch Specific Plan. (*This measure has been implemented by the Board of Supervisors' approval, in May 2003, of the Newhall Ranch WRP within the boundary of the Specific Plan.*)

SP 4.12-2 A 5.8 to 6.9 mgd water reclamation plant shall be constructed on the Specific Plan site, pursuant to County, State, and Federal design standards, to serve the Newhall Ranch Specific Plan. (*This measure will be implemented pursuant to the project-level analysis already completed for the Newhall Ranch WRP in the certified Newhall Ranch Specific Plan EIR.*)

SP 4.12-3 The Conceptual Backbone Sewer Plan shall be implemented pursuant to County, State, and Federal design standards. *(The proposed Mission Village sewer system would implement the previously adopted Conceptual Backbone Sewer Plan relative to the Mission Village portion of the Specific Plan.)*

SP 4.12-4 Prior to recordation of each subdivision permitting construction, the applicant of each subdivision shall obtain a letter from the new County sanitation district stating that treatment capacity will be adequate for that subdivision. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

SP 4.12-5 All facilities of the sanitary sewer system will be designed and constructed for maintenance by the County of Los Angeles Department of Public Works and the County Sanitation Districts of Los Angeles County, and/or the new County sanitation district or similar entity in accordance with their manuals, criteria, and requirements. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

SP 4.12-6 Pursuant to Los Angeles County Code, Title 20, Division 2, all industrial waste pretreatment facilities shall, prior to the issuance of building permits, be reviewed by the County of Los Angeles Department of Public Works, Industrial Waste Planning and Control Section and/or the new County sanitation district, to determine if they would be subject to an Industrial Wastewater Disposal Permit. *(To the extent this mitigation measure applies to Mission Village, it will be implemented concurrent with project development.)*

SP 4.12-7 Each subdivision permitting construction shall be required to be annexed into the Los Angeles County Consolidated Sewer Maintenance District. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

b. Additional Mitigation Measures Proposed by this EIR

No additional mitigation measures beyond those identified in the Newhall Ranch Specific Plan Program EIR are required or necessary because the Mission Village project would not result in any significant wastewater disposal impacts after implementation of the above mitigation measures.

8. CUMULATIVE IMPACTS

The focus of the cumulative impacts analysis is on determining whether the cumulative increase in the residential population from Santa Clarita Valley buildout, in combination with the proposed project, would adversely impact the wastewater disposal service providers that serve the residents of the Santa Clarita Valley. In order to analyze the cumulative impacts of the Mission Village project in combination with other expected future growth, the amount and location of growth expected to occur in the SCVSD sphere of influence was predicted. For this EIR, the following three separate cumulative development scenarios are analyzed to meet Los Angeles County and CEQA requirements (see **Section 3.0**, **Cumulative Impact Analysis Methodology**, for a discussion on these requirements):

Scenario 1 Existing development within the service area for the SCVSD plus Development Monitoring System (DMS) projections plus the proposed project (termed "DMS Buildout Scenario");

Scenario 2 Buildout within the Castaic Lake Water Agency (CLWA) service area based on buildout projections for CLWA service area, plus active pending *General Plan* and *Areawide Plan* amendment requests, plus the proposed project (termed "Santa Clarita Valley Cumulative Buildout Scenario"); and

Scenario 3 Buildout of the CSDLAC Facilities Plan for the Santa Clarita Valley Sanitation District.

a. DMS Buildout Scenario

The County General Plan DMS methodology uses sanitation districts as the area of analysis for wastewater treatment. The ~~Newhall Ranch County Sanitation District~~new NRCSD, which was formed effective July 27, 2006, is generally outside the sphere of influence of any existing district and has

boundaries contiguous with the boundary of the Specific Plan. The County DMS analysis for the district reflects a capacity of 6.8 mgd for the Newhall Ranch Specific Plan, sufficient to accommodate Specific Plan wastewater flows. Should future development occur within the expected tributary area[14] of the Newhall Ranch WRP and request to be annexed to the new sanitation district, the new development projects also would be included in the County's DMS. The formation of a service district does not create any environmental impacts that were not previously analyzed in the certified Newhall Ranch Specific Plan Program EIR. As a result, the proposed project's cumulative impacts under this scenario would be less than significant.

b. Santa Clarita Valley Cumulative Buildout Scenario

The Santa Clarita Valley (SCV) Cumulative Buildout Scenario entails buildout of all lands under the current land use designations indicated in the Los Angeles County Santa Clarita Valley Areawide Plan and the Los Angeles County General Plan, plus the proposed project, plus all known active pending General Plan Amendment requests in the unincorporated area of Santa Clarita Valley and in the City of Santa Clarita. **Table 4.9-2, Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario**, depicts the projected future development activity in the Valley with and without the proposed project. Utilizing loading factors provided by the CSDLAC, under this buildout scenario, there would be an additional cumulative wastewater generation of 59.3 mgd. See **Table 4.9-3, Wastewater Generation Impact Analysis – SCV Cumulative Buildout Scenario**, for the detailed breakdown of SCV Cumulative Buildout Scenario wastewater calculations.

As previously discussed, the two existing Saugus and Valencia WRPs currently have a combined treatment capacity of 28.1 mgd, and would have a total projected 20~~15~~33 capacity of approximately 34.2 mgd of wastewater. Using CSDLAC loading factors, buildout of the service areas of these two WRPs would increase the amount of wastewater generated in the SCVSD to 56.02 mgd, which is 21.82 mgd more than the proposed 20~~33~~~~15~~ SCVSD expansion of 34.2 mgd.

As stated earlier, numerous safeguards exist within the County's project approval process to ensure available treatment capacity for new development within the service areas of CSDLAC, such as connection fees to pay for the full cost of facility expansions (including increasing water reclamation plant capacity). Although some amount of development in the Santa Clarita Valley would utilize on-site septic or package treatment facilities, it is expected that most of the buildout wastewater would be treated at CSDLAC plants. If buildout of the Santa Clarita Valley was permitted to occur without provision of additional treatment capacity at either the Saugus and Valencia WRPs or another site, significant wastewater disposal impacts would occur. However, with the County's safeguards in place that ensure

14 Areas that flow by gravity to the approved Newhall Ranch WRP and which are outside the spheres of influence of the SCVSD.

no connections permits are issued if capacity is not available, no significant cumulative wastewater treatment impacts would occur.

Table 4.9-2
Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario
(Project Scenario)

Land Use Types	Cumulative Buildout w/o Project[1]	Project	Cumulative Buildout w/ Mission Village[1]
Single-Family	93,412 du	382 du	93,794 du
Multi-Family	47,621 du	4,030 du	51,651 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	18,866,030 sq. ft.	1,555,100 sq. ft.	20,421,130 sq. ft.
Hotel	2,071 room		2,071 room
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,590 students	1,156 students	279,529 students
High School	12,843 students	321 students	13,120 students
College	29,948 students		29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.	36,000 sq. ft.	231,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufact./Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.		6,380,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,209.0 ac		1,209.0 ac
Developed Parkland	467.8 ac	25.0 ac	492.8 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator[2]	413.0 sg		413.0 sg

du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator

[1] *Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development, buildout under the existing City of Santa Clarita General Plan, Santa Clarita Valley Area Plan, and active pending General Plan Amendment requests.*

[2] *Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.*

Table 4.9-3
Wastewater Generation Impact Analysis – SCV Cumulative Buildout Scenario

Land Use	Cumulative Buildout w/ Mission Village[1]	Generation Factor (gpd)	Generation (mgd)
Single Family	93,794 du	260/du	24.386
Multi-Family	51,651 du	195/du	10.072
Mobile Home	2,699 du	195/du	0.526
Commercial Retail	20,421,130 sq. ft.	100/tsf	2.042
Hotel	2,071 room	125/room	0.259
Sit-Down Restaurant	283,790 sq. ft.	1,000/tsf	0.284
Fast Food Restaurant	23,600 sq. ft.	1,000/tsf	0.024
Movie Theater	3,300 seats	3.788/seat[1]	0.013
Health Club	54,000 sq. ft.	600/tsf	0.032
Car Dealership	411,000 sq. ft.	100/tsf	0.041
Elem./Middle School	279,529 students	20/student	5.591
High School	13,120 students	20/student	0.262
College	29,948 students	20/student	0.599
Hospital	247,460 sq. ft.	250/tsf[2]	0.062
Library	231,790 sq. ft.	50/tsf[3]	0.012
Church	501,190 sq. ft.	50/tsf	0.025
Day Care	785,000 sq. ft.	200/tsf	0.157
Industrial Park	41,743,950 sq. ft.	25/tsf	1.044
Business Park	8,424,330 sq. ft.	200/tsf	1.685
Manufact./Warehouse	3,932,470 sq. ft.	25/tsf	0.098
Utilities	1,150,240 sq. ft.	25/tsf	0.029
Commercial Office	6,380,520 sq. ft.	200/tsf	1.276
Medical Office	133,730 sq. ft.	300/tsf	0.040
Golf Course	1,209.0 ac	4,356/ac	5.266
Developed Parkland	503.5 ac	4,356/ac	2.193
Undeveloped Parkland	1,000.0 ac	N/A	0
Special Generator	413.0 sg	N/A	0
Total			**56.018**

Source: Impact Sciences, Inc.
Notes:
du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator; tsf = thousand square feet
[1] *Assumes 30 square feet per seat.*
[2] *Assumes 500 square feet per hospital bed.*
[3] *Uses same number as Church.*

c. County Sanitation Districts of Los Angeles County Facilities Plan for the Santa Clarita Valley Sanitation District

CSDLAC has prepared a Facilities Plan, with a horizon year of 2015, for the SCVSD that was approved in January 1998. The Facilities Plan will estimate future wastewater generation for the probable future service area of the SCVSD in order to anticipate future treatment capacity and wastewater conveyance needs. Unlike this EIR, which estimates future wastewater generation based on the buildout of land uses within the Santa Clarita Valley Area Plan and City of Santa Clarita General Plan, plus known active pending General Plan Amendments, the CSDLAC Facilities Plan bases its projections for wastewater generation on the SCAG 1996 Regional Transportation Plan. The Facilities Plan uses a residential and commercial wastewater generation rate of 101 gallons per capita per day, plus projected industrial wastewater and contracted entitlement flow. The Facilities Plan, which was approved prior to the County's approval of the Specific Plan, also assumes that if the Specific Plan is approved, its wastewater would be treated at the Newhall Ranch WRP, rather than by the SCVSD. According to CSDLAC estimates, total flows projected from the Santa Clarita Valley in 20~~15~~33, exclusive of the Specific Plan, would be 34.2 mgd.[15] ~~The projected site capacity of the Saugus and Valencia WRPs will be a total of 34.2 mgd by the year 2015.[16]~~ In addition, SCVSD does not expect to exceed a daily capacity of 34.2 mgd because connection permits will not be issued that would exceed this amount. According to recent SCVSD flow projects based on the SCAG 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033. Consequently, the planned short-term use of the Valencia WRP to treat ~~1.13~~0.96 mgd of the project's wastewater is expected to have no impact on future expansion of the SCVSD facilities. In addition, as describe under "Project Impacts" above, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility. Because future project flows will be directed to the Newhall Ranch WRP, and because safeguards are in place that ensure no SCVSD connection permits are issued if capacity is not available, the proposed project would not result in significant cumulative impacts on the SCVSD under this scenario.

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15 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.~~CSDLAC comment letter to Daniel Fierros, Department of Regional Planning, dated January 22, 2007.~~

16 Preliminary WRP Site Capacity Evaluations for the SCVSD, County Sanitation Districts of Los Angeles County, 1996.

9. CUMULATIVE MITIGATION MEASURES

Cumulative development would be required to implement similar mitigation as the proposed project, if necessary, determined on a project specific basis. Therefore, no additional mitigation is recommended or required in the context of this project.

10. SIGNIFICANT UNAVOIDABLE IMPACTS

a. Project-Specific Impacts

Provided that proposed mitigation measures are properly implemented, no significant unavoidable impacts are expected to result from implementation of the proposed project.

b. Cumulative Impacts

Provided that mitigation measures are properly implemented, no significant unavoidable cumulative impacts are expected to result from implementation of the proposed project.

4.9 WASTEWATER DISPOSAL

1. SUMMARY

Construction-related wastewater disposal impacts would be less than significant, as portable, on-site sanitation facilities would be utilized during construction activities.

Once project construction is complete, the proposed Mission Village project would generate a worst-case average total of approximately 0.96~~1.13~~ million gallons per day (mgd) of wastewater. Of the total project wastewater generation, approximately 0.695~~884~~ mgd would be treated by the Newhall Ranch County Sanitation District (NRCSD) at the Newhall Ranch Water Reclamation Plant (WRP) once WRP construction is complete. Due to gravitational limitations, the remaining approximately 0.266~~41~~ mgd would be permanently treated at the Valencia WRP, subject to conditions specified in a Joint Sewerage Services Agreement to be executed between NRCSD and the Santa Clarita Valley Sanitation District (SCVSD). The treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. Until the development of the Newhall Ranch WRP is complete, there are three potential scenarios for the interim conveyance and treatment of the portion of wastewater generated by the Mission Village project that ultimately would be permanently treated at the Newhall Ranch WRP. The first scenario is to construct an initial phase of the Newhall Ranch WRP to serve the Mission Village project site, with buildout of the WRP occurring over time as demand for treatment increases. Under this scenario, the initial phase of the WRP would be designed and constructed to accommodate the project's predicted wastewater generation. The second scenario would temporarily direct all wastewater flows from the Mission Village project by pipeline across the Commerce Center Drive Bridge to the Valencia WRP until the first phase of the Newhall Ranch WRP is complete. The third scenario assumes that the Commerce Center Drive Bridge is not constructed until after occupancy of some of the land uses in the Mission Village project, and an interim pump station would be constructed that would direct wastewater to the existing Valencia WRP. Under both the second and third scenarios, wastewater from the Mission Village project would be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational. (Under an agreement with the SCVSD, the Valencia WRP could temporarily treat wastewater from Mission Village (and Landmark Village) until such time as the Newhall Ranch WRP is constructed and operational. Based on the County Sanitation Districts of Los Angeles County (CSDLAC) future wastewater generation estimates and the planned expansion of the Saugus and Valencia WRPs, the Valencia WRP would have sufficient capacity to temporarily accommodate the Mission Village project's total predicted wastewater generation of ~~1.13~~0.96 mgd. For these reasons, wastewater disposal impacts associated with Mission Village would be less than significant.

2. INTRODUCTION

a. Relationship of Project to Newhall Ranch Specific Plan Program EIR

Section 4.12 of the Newhall Ranch Specific Plan Program EIR identified and analyzed the existing conditions, potential impacts, and mitigation measures associated with wastewater disposal for the entire Newhall Ranch Specific Plan. The Newhall Ranch Specific Plan Program EIR concluded that Specific Plan implementation without mitigation would result in significant wastewater disposal impacts, but that construction of the Newhall Ranch WRP and associated waste transmission infrastructure, as well as implementation of the identified mitigation measures, would reduce the impacts to below a level of significance. All subsequent project-specific development plans and tentative subdivision maps must be consistent with the Newhall Ranch Specific Plan, adopted May 2003, the County of Los Angeles General Plan, and the Santa Clarita Valley Area Plan as they pertain to wastewater disposal, and applicable County regulations.

This project-level wastewater disposal impact analysis is tiered from the previously certified Newhall Ranch Specific Plan Program EIR. **Section 4.9** assesses the Mission Village project site's existing conditions relative to wastewater disposal, impacts on wastewater disposal, applicable mitigation measures from the Newhall Ranch Specific Plan Program EIR, and any additional mitigation measures recommended by this EIR for the Mission Village project.

3. SUMMARY OF THE NEWHALL RANCH SPECIFIC PLAN PROGRAM EIR FINDINGS

The approved Newhall Ranch WRP will be located within the Specific Plan area to treat Specific Plan-generated wastewater. The WRP site is located on the south side of State Route 126 (SR-126) adjoining the Santa Clara River, near the Los Angeles County/Ventura County line. Without construction of the Newhall Ranch WRP and associated waste transmission infrastructure, the increased demand for wastewater treatment associated with buildout of the Specific Plan is considered a significant impact.

Based on the Newhall Ranch Specific Plan Program EIR and record, the County's Board of Supervisors found that the significant wastewater disposal impacts caused by buildout of the Specific Plan were mitigated to below levels of significance with construction of the Newhall Ranch WRP, the associated waste transmission infrastructure and adoption of specified mitigation measures.[1]

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1 Mitigation Measures 4.12-1 through 4.12-7 in both the certified Newhall Ranch Specific Plan Program EIR and adopted Mitigation Monitoring Plan for the Specific Plan (May 2003). All of these mitigation measures are reiterated in the mitigation measures portion of this EIR.

The project-level wastewater/sewer plan is intended to be consistent with, and implement, the Specific Plan's approved Conceptual Backbone Sewer Plan (Exhibit 2.5-3 of the Specific Plan). This plan set forth a program-level system for wastewater/sewage collection for Newhall Ranch. The Specific Plan also committed that all sewer system facilities would be designed and constructed for maintenance by the County, CSDLAC, or a new County sanitation district in accordance with their manuals, criteria, and requirements. **Figure 1.0-24, Newhall Ranch Specific Plan Backbone Drainage Plan – Mission Village**, depicts the Specific Plan's Conceptual Backbone Sewer Plan, as it relates to Mission Village. In response to the approved Specific Plan, the Los Angeles County Local Area Formation Commission (LAFCO) has approved formation of the Newhall Ranch County Sanitation District, effective July 27, 2006.[2] The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd.

The environmental effects of constructing and operating the WRP were evaluated at the project-level in the certified Newhall Ranch Specific Plan Program EIR. The EIR determined the WRP would have significant unavoidable impacts on the following environmental categories: agricultural resources, air quality, visual quality, and solid waste. Agricultural impacts would result from the conversion of 15 acres of prime agricultural land to an urban use. Air quality impacts associated with site grading would generate quantities of dust exceeding the South Coast Air Quality Management District (SCAQMD) daily threshold of significance, even after application of all available dust controls to reduce the amount of dust by roughly 61 percent. Visual quality impacts were due to the contrast of the WRP site with the vacant land within the river corridor, both during and following construction. Solid waste impacts were a result of project landfill disposal of biosolids produced as a byproduct of the wastewater treatment process. Because such facilities are limited in number and have finite capacity, and because new facilities are expensive and difficult to develop impacts to solid waste are considered significant and unavoidable. Based on the Newhall Ranch Specific Plan Final EIR for the WRP and record, the County's Board of Supervisors found that the significant unavoidable impacts caused by the WRP were offset by overriding economic, legal, social, and public benefits. Consistent with section 15093 of the *California Environmental Quality Act (CEQA) Guidelines*, these benefits were found to outweigh the significant unavoidable impacts and make them acceptable.

4. EXISTING CONDITIONS

Relevant information and the technical studies from the certified Newhall Ranch Specific Plan Program EIR (see Draft EIR, Appendix 4.12) were assessed to determine if there were any wastewater disposal issues that were not examined in the certified Program EIR. It was determined that all significant wastewater disposal effects were identified, adequately addressed and mitigated or avoided at the programmatic level of review in the certified Program EIR and related environmental findings. (*State CEQA Guidelines*, Section 15152). Therefore, at the project level, this EIR incorporates by reference the

2 CSDLAC comment letter to Daniel Fierros, Department of Regional Planning, dated January 22, 2007.

existing conditions analysis and background information relating to wastewater disposal from the certified Newhall Ranch Specific Plan Program EIR (Section 4.12). This information has been updated as appropriate.

This section is divided into two distinct topics:

- Wastewater treatment facilities
- Wastewater collection system

a. Wastewater Treatment Facilities

Most wastewater generated within the Santa Clarita Valley is treated at two existing WRPs, which are operated by the Santa Clarita Valley Sanitation District (SCVSD). The SCVSD is a member of the CSDLAC and is the wastewater provider for the City of Santa Clarita and some surrounding unincorporated County areas. The existing Saugus WRP is located at 26200 Springbrook Avenue in Saugus. The existing Valencia WRP is located at 28185 The Old Road in Valencia. **Figure 4.9-1**, **Existing Wastewater Treatment Facilities and Sanitation Districts**, shows the existing wastewater facilities and Sanitation Districts within the immediate vicinity of the project site that provide primary, secondary, and tertiary treatment. The SCVSD has a permitted treatment capacity of 28.1 mgd and a treated average of 20.5 mgd.[3] While a small portion of the Newhall Ranch Specific Plan site is within the Sphere of Influence of the SCVSD, virtually the entire Specific Plan site is outside the service area of the SCVSD. Currently, wastewater generated by the few existing buildings located on the Newhall Ranch Specific Plan site is accommodated by on-site septic systems. No wastewater is currently generated from the Mission Village project site.

The mechanism used to fund expansion projects is the SCVSD's Connection Fee Program. Prior to the connection of the local sewer network to the CSDLAC system, all new users are required to pay for their fair share[4] of the SCVSD sewerage system expansion through a "connection fee." The fees fund treatment capacity expansion and trunk lines, while on-site sewer mains are the responsibility of the developer.

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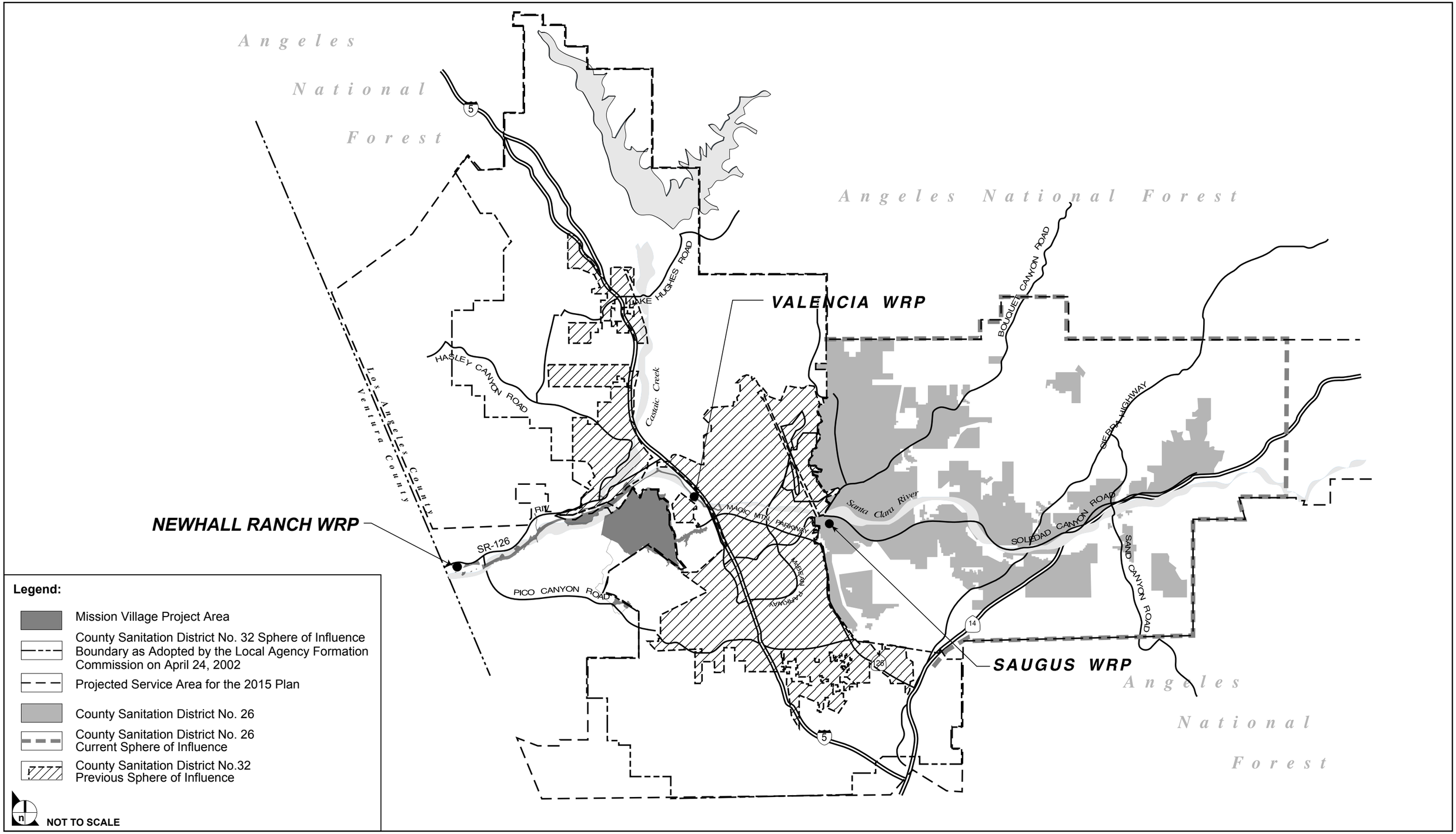
3 County Sanitation Districts of Los Angeles County. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.

4 The fair share is equivalent to the cost of expanding the system to accommodate the anticipated sewage flows from the new users.



SOURCE: Impact Sciences, Inc., 2003

FIGURE **4.9-1**

Existing Wastewater Treatment Facilities and Sanitation Districts

32-99•05/10

The rate at which connections are made—and revenues accumulate—drives the rate at which periodic expansions of the system will be designed and built. Importantly, it should be noted that connection permits are not issued if there is not sufficient capacity, although this is a rare occurrence as the SCVSD routinely monitors system capacity and anticipated development to ensure sufficient capacity for approved developments. Therefore, the expansion of district facilities, such as trunk lines, may not be immediate if adequate treatment capacity does not exist at the WRP to serve new users, or the expansion may occur in the future if it is determined that there is adequate WRP capacity to serve immediately new users, but inadequate capacity to serve future development within the tributary area(s) of the affected collection/treatment facilities, thereby necessitating future system expansions. In the latter case, the connection fees paid by new users are deposited into a restricted Capital Improvement Fund (CIF) used solely to capitalize the future expansion of affected system facilities.

As stated above, connection permits are only issued if there is sufficient collection and treatment capacity; however, SCVSD routinely monitors system capacity and anticipated development to ensure sufficient capacity for approved developments. Consequently, SCVSD's denial of a connection permit is extremely rare, because expansions are constructed when capacity is needed, not when a threshold amount of connection revenues has been collected. SCVSD anticipates that the new NRCSD would adopt similar connection permit practices.

The cyclical process of building phased expansions and collecting connection fees can continue indefinitely. The only restriction would be when the districts run out of land. Existing facilities can be expanded to handle a daily capacity of 34.2 mgd, which is sufficient to meet demand up until 20~~15~~33.[5] The district does not expect to exceed a daily capacity of 34.2 mgd because connection permits will not be issued that would exceed this amount.

CSDLAC has prepared a Facilities Plan, with a horizon year of 2015, for the SCVSD. The Facilities Plan, approved in January 1998, estimates future wastewater generation for the probable future service area of the SCVSD in order to anticipate future treatment capacity and wastewater conveyance needs. According to CSDLAC estimates, total flows projected from the Santa Clarita Valley in 2015, exclusive of Newhall Ranch, would be 34.2 mgd. This projection is based on Southern California Association of Governments (SCAG) 1996 population projections. As a result of this finding, CSDLAC proposed a phased plan to incrementally expand the treatment facilities at the Saugus and Valencia WRPs to meet future needs to a total of 34.2 mgd.[6] This phased expansion plan, which would increase treatment capacity by

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5 ~~County Sanitation Districts of Los Angeles County. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998~~CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.

6 County Sanitation Districts. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.

approximately 15 mgd, has been approved. The most recent phase was completed in May 2005 and expanded treatment capacity by approximately 9 mgd, or approximately 47 percent, to the current total treatment capacity of approximately 28.1 mgd. Based on populations projections published in the most recent SCAG 2004~~8~~ Regional Transportation Plan, the Valencia WRP has adequate capacity through the year 201~~5~~33. ~~Another phase (Stage VI) of treatment facility expansion would increase capacity by 6 mgd, but will not be constructed until flow materializes.~~[7]

According to recent SCVSD flow projections based on SCAG's 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033.

b. Wastewater Collection System

The CSDLAC wastewater collection system is composed of service connections that tie in to the local collection network. This local network, composed of secondary and primary collectors, flows into the districts' trunk wastewater mains and the water reclamation plants. The Newhall Ranch Consolidated Sewer District (NRCSD) maintains the wastewater trunk mains that lead to the Saugus and Valencia WRPs, and the local collection network is maintained by the Los Angeles County Department of Public Works' Consolidated Sewer Maintenance District ~~for the City of Santa Clarita (~~CSMD~~)~~.

The Mission Village project site is presently undeveloped and there is no wastewater collection and conveyance system on the property. Existing gravity sewer mains run parallel to The Old Road within the right-of-way and flow to a sewer lift station located near the intersection of The Old Road and Henry Mayo Drive at the east side of The Old Road right-of-way. The existing lift station pumps wastewater through a 16-inch force main to the Valencia WRP. **See Figure 4.9-1.**

Operation and maintenance of local sewer lines within areas of unincorporated Los Angeles County, and the City of Santa Clarita, are the responsibility of the ~~Consolidated Sewer Maintenance District of the Los Angeles County Department of Public Works~~CSMD. The ~~Consolidated Sewer Maintenance District~~CSMD requires that new subdivision wastewater systems connect to the District's existing sanitary wastewater system, and any developer constructing a new wastewater line coordinate the construction and dedication of any such wastewater line with the District for future operation and maintenance. Operation and maintenance of the regional trunk sewer lines is the responsibility of the ~~NRCSD~~Newhall Ranch Consolidated Sewer District. It would then be the responsibility of ~~the NRCSD~~ this district to upgrade the

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7 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.~~County Sanitation Districts. *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, January 1998.~~

wastewater collection and treatment systems by providing relief for existing trunk lines nearing capacity and expanding treatment plants to provide sanitation service to outlying areas.[8]

5. PROPOSED PROJECT IMPROVEMENTS

The project proposes to develop a total of 4,412 residential dwelling units consisting of 382 single-family homes and 4,030 multi-family units, including attached and detached condominiums, age qualified, and apartment units, with a total residential population of 10,802.[9] The project would also include 1.555 million square feet of commercial/mixed-uses, a 9.5-acre elementary school, fire station, public library, bus transfer station, parks, public and private recreational facilities, trails, and road improvements.

The project-level wastewater/sewer collection system consists of gravity sewers, forced mains, and pump stations. As noted, the long-range plan is for the Newhall Ranch WRP to be constructed exclusively to serve uses within Newhall Ranch. The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd. LAFCO approved formation of the Newhall Ranch County Sanitation District, effective July 27, 2006. The environmental effects of constructing and operating the WRP were evaluated at the project-level in the certified Newhall Ranch Program EIR.

Until the previously approved Newhall Ranch WRP is constructed and operational, one of several alternative wastewater treatment options will be implemented for the Mission Village project. These alternative treatment options are described below in **subsection 6, Project Impacts**, along with the potential impacts associated with implementation of each option.

As stated above, the NRCSD will provide wastewater services for the Newhall Ranch Specific Plan, including the Mission Village project site. The SCVSD is a member of the County Sanitation Districts of Los Angeles County and is the wastewater service provider for the City of Santa Clarita and some surrounding unincorporated County areas. To coordinate wastewater management services between the SCVSD and the NRCSD, an Interconnection Agreement was signed in 2002 between the SCVSD and the project applicant.

The Interconnection Agreement was developed to establish a logical plan for the development and administration of the new NRCSD and its infrastructure, and it sets conditions under which the first 6,000 homes in Newhall Ranch may temporarily discharge wastewater to the existing Valencia WRP. The

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8 Telephone conversation with Basil Hewitt at the County Sanitation Districts of Los Angeles County, September 1, 2005.

9 Based upon County of Los Angeles estimates of 3.17 persons per single-family household and 2.38 persons per multi-family houeshold.

conditions include payment of the standard connection fee (fair share of the cost of the existing infrastructure) and transfer of title of the 22-acre Newhall Ranch WRP site to the NRCSD. Newhall Ranch residents also would pay the Districts an annual service charge to recover the full cost of treating their wastewater at the Valencia WRP. Temporary treatment of wastewater at the Valencia WRP would not eliminate the need for the developer to construct the Newhall Ranch WRP; instead, the temporary treatment of wastewater at the existing Valencia WRP is a practical engineering decision based on the need to build up an adequate, steady flow of wastewater before starting up the Newhall Ranch WRP. Such an approach would match the slower pace of the development, but would not eliminate the Specific Plan requirement for construction of the Newhall Ranch WRP.

The Interconnection Agreement was considered and approved at the January 9, 2002 meetings of the CSDLAC, which were open to the public. Further, the Interconnection Agreement was referenced in previous County and LAFCO resolutions supporting formation of the new NRCSD. A copy of the Interconnection Agreement is found in **Appendix F4.9** of the Final EIR.[10]

6. PROJECT IMPACTS

The analysis of potential impacts to wastewater disposal associated with construction and operation of the proposed Mission Village project, including the significance criteria applicable to assessing such impacts, is presented below:

a. Significance Threshold Criteria

According to Appendix G of the *State CEQA Guidelines*, a project would result in a significant wastewater disposal impact if the project would

(a) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; or

(b) require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(c) result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

With respect to criterion (a), the proposed project will comply with all applicable wastewater treatment requirements, including obtaining all necessary permits. Please see **Section 4.8, Water Service**, for further

[10] To the extent required, the SCVSD may utilize the Mission Village EIR or the Landmark Village EIR, as necessary, if one of the above Valencia WRP sewer options is selected and one or both of the project EIRs are certified by the County's Board of Supervisors.

discussion. As to criterion (b), the proposed project will not require the construction of new, or the expansion of existing, wastewater treatment facilities, beyond the Newhall Ranch WRP, the environmental impacts of which, as previously noted, were analyzed in the Newhall Ranch Specific Plan/WRP EIR. Therefore, the focus of the following impact analysis is on criterion (c) and the available treatment capacity to serve the project's projected wastewater demand.

b. Construction-Related Impact Analysis

Construction contractors for the project would provide portable, on-site sanitation facilities that would be serviced at approved disposal facilities and/or treatment plants. The amount of construction-related wastewater that would be generated is not expected to have a significant impact on these disposal/treatment facilities due to expected low volume and temporary nature of the waste generated during construction.

c. Operational Impacts

(1) Demand

As shown in **Table 4.9-1, Mission Village Wastewater Generation**, the proposed project would generate a worst-case average total of approximately 0.~~884~~ 695 mgd of wastewater that would be treated by the NRCSD at the Newhall Ranch WRP, and 0.266~~41~~ mgd that would be permanently treated at the Valencia WRP, subject to conditions specified in a Joint Sewerage Services Agreement to be executed between NRCSD and the SCVSD. Flows from the project site would be lifted and combined for conveyance across the River and collection into a Sanitation District trunk sewer located along the north side of the River. This trunk will either convey the effluent by gravity to the Newhall Ranch WRP or be pumped back to the Valencia WRP under the Interconnection agreement with SCVSD. Flows from a portion of the project site that is the proposed location of 1,239 multi-family units (Sewer System C) and approximately 732,000 square feet of commercial naturally drain towards the current sewer line terminus in Magic Mountain Parkway. Flows from this portion of the project site are proposed to connect to the sewer lines in Magic Mountain Parkway for treatment at the Valencia WRP.

Table 4.9-1
Mission Village Wastewater Generation

Land Use	Units	Quantity	Generation Factor (gpd per designated unit)	Wastewater Generation (gpd)
Treatment at Newhall Ranch WRP (Ultimate Condition)				
Residential				
Single Family	du	382	260.00	99,320
Multi-Family	du	2,791	156~~195~~.00	435,396~~544,245~~
Non-Residential				
Commercial Retail	tsf	823.43~~1,555.1~~	100.00	82,343~~155,510~~
Elementary School	tsf	~~413.82~~375	200.00	75,000~~82,764~~
Library	tsf	60	50.00	3,000
			Subtotal	*695,059~~884,839~~*
Treatment at Valencia WRP (Ultimate Condition)				
Multi-Family	du	1,239	15~~6~~95.00	193,284~~241,605~~
Non-Residential				
Commercial Retail	Tsf	732.57	100	73,257
			Subtotal	*266,541~~41,605~~*
			Total	**961,600~~1,126,444~~**

Source: County Sanitation Districts of Los Angeles Loadings and Unit Rates.
du = dwelling units; tsf = thousand square feet

(2) Wastewater Treatment

As previously discussed, the long-range plan is for the Newhall Ranch WRP to be constructed exclusively to serve uses within Newhall Ranch. The new WRP's capacity would be 6.8 mgd, with a maximum flow of 13.8 mgd. A new County sanitation district has been formed and is known as the Newhall Ranch County Sanitation District or NRCSD. Project generated wastewater, 0.695~~884~~ mgd, would be treated by the NRCSD at the Newhall Ranch WRP, although interim treatment at the Valencia WRP would occur under some of the wastewater treatment scenarios as described below. Project generated wastewater of approximately 0.266~~41~~ mgd would be treated at the Valencia WRP permanently. As the planned treatment capacity of the Newhall Ranch WRP would be sufficient to treat wastewater flows from the entire Specific Plan project, no significant long-term operational impacts would result from the treatment of wastewater generated by the Mission Village project.

~~However, u~~Until the Newhall Ranch WRP construction is completed and the plant is operational, on an interim basis, three wastewater disposal options are available to treat the majority of the wastewater

generated by the proposed project. One scenario, as shown in **Figure 1.0-32, Mission Village Wastewater System – Scenario 1**, provides for the construction of an initial phase of the Newhall Ranch WRP to serve the Mission Village ~~subdivision~~project. Under this scenario, buildout of the WRP would occur over time as demand for treatment increases due to subsequent development of the Newhall Ranch Specific Plan. The second scenario, as shown in **Figure 1.0-33, Mission Village Wastewater System – Scenario 2**, provides for an option should the Newhall Ranch WRP not yet be constructed. In this scenario, flows would be piped across the Commerce Center Drive Bridge to an interim pump station north of the Santa Clara River along the utility corridor where wastewater would be pumped back to an existing CSDLAC pump station, then to the existing Valencia WRP, located upstream of the project site along I-5. The pump station would be used until such time as the first phase of the Newhall Ranch WRP is constructed~~.~~ and operational. The third scenario, as shown in **Figure 1.0-34, Mission Village Wastewater System – Scenario 3**, is an interim option that would be implemented in the event that the Commerce Center Drive Bridge is not constructed prior to the occupancy of new land uses on the Mission Village project site. Under this scenario, an interim pump station would be constructed near the intersection of "GG" Street and Commerce Center Drive that would pump effluent to the existing Valencia WRP, which is located approximately 0.5 mile east of the project site along I-5. Under this scenario, a force main from the interim pump station on the project site to the proposed sewer mainline in Magic Mountain Parkway would be constructed. This proposed sewer mainline would connect with an existing line at the intersection of The Old Road and Magic Mountain Parkway. As with Scenario 2 described above, wastewater from the Mission Village project would continue to be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational, consistent with the Interconnection Agreement. The available capacity under each of these three treatment scenarios is discussed below.

(a) Treatment Scenario 1

Project generated wastewater requiring treatment has been calculated at approximately ~~1.13~~0.96 mgd. At buildout, the treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. The Newhall Ranch WRP has been designed to serve the buildout of the Newhall Ranch Specific Plan area, of which Mission Village is a part. Under this treatment scenario, the first phase of the WRP would be sufficiently sized to accommodate wastewater from the Mission Village project. The WRP was conditioned by the Board of Supervisors to be designed and constructed to the standards of CSDLAC and state standards and requirements. In addition, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility. As a result, no significant operational impacts would occur under this scenario.

(b) Treatment Scenario 2

Under this scenario, an interim pump station would be constructed along the utility corridor to pump wastewater via pipeline to the Valencia WRP. As a result of CSDLAC future wastewater generation estimates, CSDLAC proposed a two-phase plan to expand the SCVSD treatment facilities, which include the Valencia WRP, to meet anticipated future wastewater disposal needs of 34.~~1~~2 mgd.[11] The most recent phase was completed in May 2005 and expanded treatment capacity by approximately 9 mgd, or approximately 47 percent, to the current total treatment capacity of approximately 28.1 mgd. Based on population projections ~~published in~~ from the SCAG ~~2004~~ Regional Transportation Plan, 2008, the previously approved Stage VI expansion of the Valencia WRP is not expected to be needed until approximately 2021 and the site build-out capacity of 34.2 mgd is not expected to be reached until 2033.[12] ~~has adequate capacity through the year 2015. Another phase (Stage VI) expansion would increase capacity by 6 mgd, but will not be constructed until flow materializes.[13] According to recent SCVSD flow projections based on the SCAG 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033.~~ Consequently, the planned short-term use of the Valencia WRP to treat ~~1.13~~0.96 mgd of the project's wastewater is expected to have no impact on future expansion of the SCVSD facilities. In addition, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility.

Additionally, as stated earlier, numerous safeguards exist within the County's project approval process to ensure available treatment capacity, including, as noted above, that connection permits for new development are not issued if there is not sufficient capacity. Moreover, mitigation adopted by the County as part of its approval of the Specific Plan provides that prior to recordation of each subdivision permitting construction; the applicant is required to obtain a letter from the new County sanitation district stating that treatment capacity will be adequate for that subdivision (Mitigation Measure SP 4.12-4). As a result, no significant operational impacts would occur under this scenario.

(c) Treatment Scenario 3

Similar to Scenario 2, under this scenario wastewater from the Mission Village project would be conveyed to SCVSD and, as discussed immediately above, the planned short-term use of the Valencia WRP to treat the project's wastewater can be accommodated, as well as the permanent treatment of approximately

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11 Ibid.

12 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.

13 CSDLAC comment letter to Daniel Fierros, Los Angeles County Department of Regional Planning, dated January 22, 2007.

0.266 mgd of project wastewater. For this reason, no significant operational impacts would occur under this scenario.

(3) Collection Facilities

The following analysis is based on the Sewer Area Study for Mission Village prepared by PSOMAS in February 2010 For purposes of designing wastewater collection facilities compatible with local topography, the Mission Village project site was divided into five sewer systems designated as Systems A, B, B1, B2, and C, as shown in **Figure 4.9-2**, **Mission Village Sewer Systems**. In addition to Mission Village wastewater, wastewater flow from two off-site developments would be conveyed through the Mission Village system—the Legacy Village (VTTM 061996), and Homestead (VTTM 061996), located to the south, east, and west of the project site, respectively. Entrada (VTTM 53295) will tie into an off-site line in Magic Mountain Parkway that would be constructed by the Mission Village project.

Mission Village Sewer System "A" would combine a portion of the wastewater flow from the Legacy Village development and a portion of the Homestead project effluent with flow generated within this part of the Mission Village site by gravity flow to a pump station located near Lion Canyon. The wastewater would then be pumped to Mission Village Sewer System B2 and would flow, with effluent generated by uses within System "B2," to Commerce Center Drive where it would be combined with System "B." Mission Village Sewer Systems "B" and "B2" would convey wastewater flow via gravity, down Commerce Center Drive. This flow would be combined with that from System "B1".

System C drains naturally towards the current terminus in Magic Mountain Parkway. This system will be sewered through the extension of sewer lines in Magic Mountain Parkway, with a tie in to an existing trunk sewer in the Old Road that is connected to the Valencia WRP via an existing 30-inch siphon under the Santa Clara River adjacent to the Old Road Bridge.

If the first phase of the Newhall Ranch WRP is used to treat effluent generated by the proposed project, as described in Treatment Scenario 1, the wastewater described above would flow via gravity across the Commerce Center Drive Bridge to a connection with the Newhall Ranch Santa Clara River Interceptor located on the north side of the Santa Clara River and then on to the Newhall Ranch WRP.

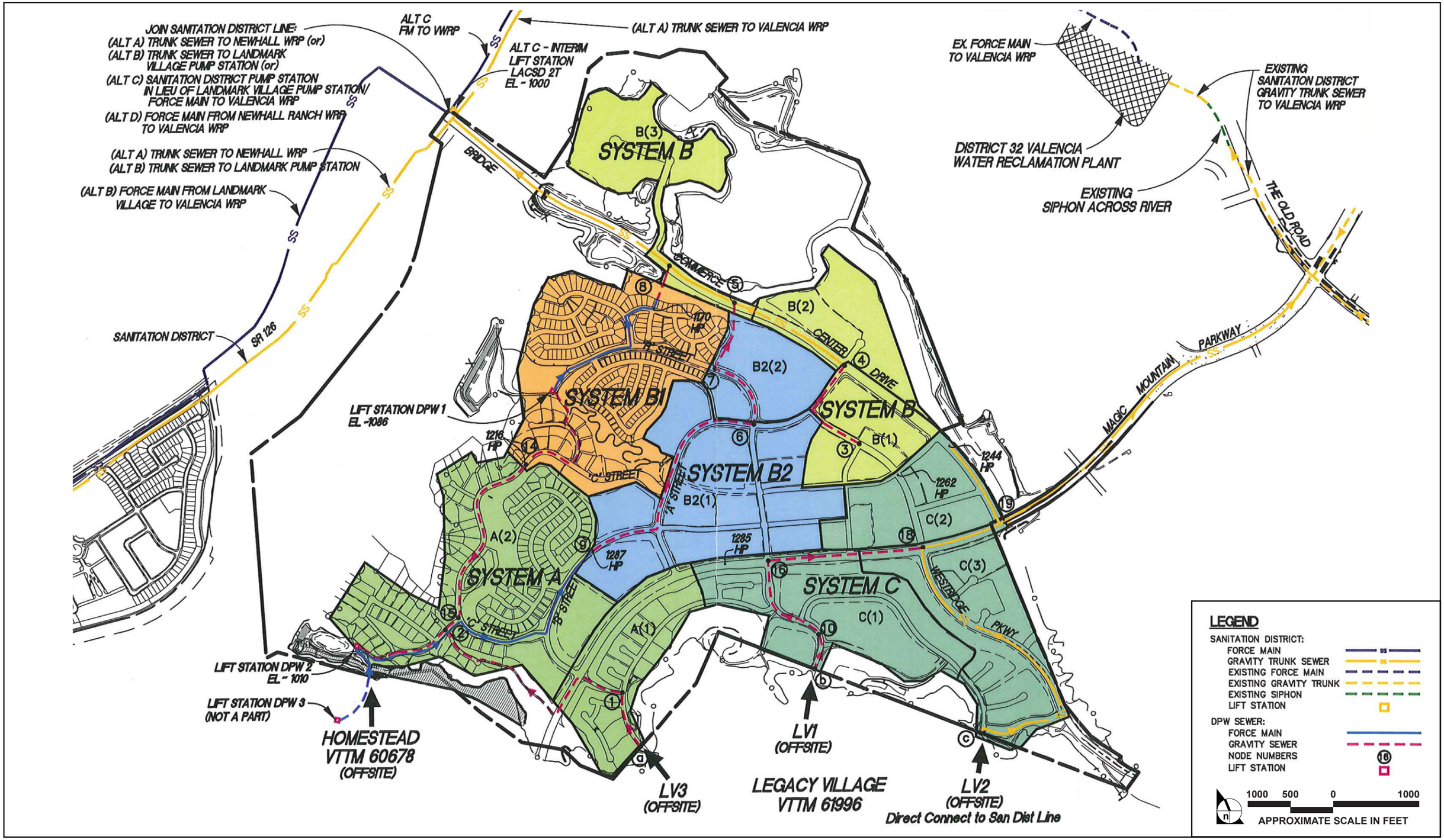
If the project follows Treatment Scenario 2, wastewater flows from Mission Village would be temporarily directed to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is ~~complete~~ constructed and operational. This alternative would require a temporary off-site Sanitation District lift station equipped with a force main to pump the effluent to an existing pump station at Henry Mayo/The Old Road intersection that pumps directly to the Valencia WRP. Under this scenario, if the Landmark Village project is developed prior to the Mission Village project, a gravity trunk main would be constructed along SR-126 from Commerce Center Drive to the temporary off-site lift station proposed as

part of Landmark Village. This lift station would pump effluent from both Mission Village and Landmark Village through a force main to the existing pump at the Henry Mayo Drive/The Old Road intersection and then on to the Valencia WRP.

Under Treatment Scenario 3, the Commerce Center Drive Bridge would not be constructed prior to occupancy of new land uses in Mission Village. This scenario would require the development and use of an interim pump station near the intersection of "GG" Street and Commerce Center Drive that would pump effluent to the existing Valencia WRP, which is located approximately 0.5 mile east of the project site along I-5. A pipeline from the interim pump station on the project site to the Valencia WRP would be constructed along the Magic Mountain Parkway Extension and would connect with an existing line at the intersection of The Old Road and Magic Mountain Parkway. As with Scenario 2 described above, wastewater from the Mission Village project would be pumped temporarily to the Valencia WRP until such time as the first phase of the Newhall Ranch WRP is constructed and operational.

Under Treatment Scenarios 1, 2, and 3, wastewater flows from Mission Village Sewer System C would be combined with a portion of Legacy Village effluent and wastewater generated from the Entrada development and drained via gravity flow through the sewer under Magic Mountain Parkway. This sewer would connect to an existing 30-inch trunk main that siphons under the Santa Clara River at The Old Road Bridge to the Valencia WRP.

All new lines would be designed and constructed to meet Los Angeles County Department of Public Works, CSDLAC, and state standards and requirements. Therefore, wastewater collection system impacts under any of the three scenarios are considered less than significant.



SOURCE: PSOMAS – February 2010

FIGURE **4.9-2**

Mission Village Sewer Systems

32-99•05/10

7. MITIGATION MEASURES

The County previously adopted mitigation measures required to be implemented as part of the approved Newhall Ranch Specific Plan. These mitigation measures, as they relate to wastewater disposal, are found in the certified Newhall Ranch Specific Plan Program EIR and adopted Mitigation Monitoring Plan (May 2003). The project applicant has committed to implementing the applicable mitigation measures from the Newhall Ranch Specific Plan to ensure that future development of the project site would not result in wastewater disposal impacts and would not adversely affect adjacent properties.

a. Mitigation Measures Required by the Adopted Newhall Ranch Specific Plan, as Related to the Mission Village Project

The following mitigation measures (**Mitigation Measures SP 4.12-1** through **SP 4.12-7**, below) were adopted by the County in connection with its approval of the Newhall Ranch Specific Plan (May 2003). The applicable mitigation measures will be implemented, or have been implemented already, to mitigate the potentially significant wastewater disposal impacts associated with the Specific Plan, including the proposed Mission Village project.

SP 4.12-1 The Specific Plan shall reserve a site of sufficient size to accommodate a water reclamation plant to serve the Newhall Ranch Specific Plan. (*This measure has been implemented by the Board of Supervisors' approval, in May 2003, of the Newhall Ranch WRP within the boundary of the Specific Plan.*)

SP 4.12-2 A 5.8 to 6.9 mgd water reclamation plant shall be constructed on the Specific Plan site, pursuant to County, State, and Federal design standards, to serve the Newhall Ranch Specific Plan. (*This measure will be implemented pursuant to the project-level analysis already completed for the Newhall Ranch WRP in the certified Newhall Ranch Specific Plan EIR.*)

SP 4.12-3 The Conceptual Backbone Sewer Plan shall be implemented pursuant to County, State, and Federal design standards. *(The proposed Mission Village sewer system would implement the previously adopted Conceptual Backbone Sewer Plan relative to the Mission Village portion of the Specific Plan.)*

SP 4.12-4 Prior to recordation of each subdivision permitting construction, the applicant of each subdivision shall obtain a letter from the new County sanitation district stating that treatment capacity will be adequate for that subdivision. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

SP 4.12-5 All facilities of the sanitary sewer system will be designed and constructed for maintenance by the County of Los Angeles Department of Public Works and the County Sanitation Districts of Los Angeles County, and/or the new County sanitation district or similar entity in accordance with their manuals, criteria, and requirements. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

SP 4.12-6 Pursuant to Los Angeles County Code, Title 20, Division 2, all industrial waste pretreatment facilities shall, prior to the issuance of building permits, be reviewed by the County of Los Angeles Department of Public Works, Industrial Waste Planning and Control Section and/or the new County sanitation district, to determine if they would be subject to an Industrial Wastewater Disposal Permit. *(To the extent this mitigation measure applies to Mission Village, it will be implemented concurrent with project development.)*

SP 4.12-7 Each subdivision permitting construction shall be required to be annexed into the Los Angeles County Consolidated Sewer Maintenance District. *(This mitigation measure, as it applies to Mission Village, will be implemented concurrent with project development.)*

b. Additional Mitigation Measures Proposed by this EIR

No additional mitigation measures beyond those identified in the Newhall Ranch Specific Plan Program EIR are required or necessary because the Mission Village project would not result in any significant wastewater disposal impacts after implementation of the above mitigation measures.

8. CUMULATIVE IMPACTS

The focus of the cumulative impacts analysis is on determining whether the cumulative increase in the residential population from Santa Clarita Valley buildout, in combination with the proposed project, would adversely impact the wastewater disposal service providers that serve the residents of the Santa Clarita Valley. In order to analyze the cumulative impacts of the Mission Village project in combination with other expected future growth, the amount and location of growth expected to occur in the SCVSD sphere of influence was predicted. For this EIR, the following three separate cumulative development scenarios are analyzed to meet Los Angeles County and CEQA requirements (see **Section 3.0**, **Cumulative Impact Analysis Methodology**, for a discussion on these requirements):

Scenario 1 Existing development within the service area for the SCVSD plus Development Monitoring System (DMS) projections plus the proposed project (termed "DMS Buildout Scenario");

Scenario 2 Buildout within the Castaic Lake Water Agency (CLWA) service area based on buildout projections for CLWA service area, plus active pending *General Plan* and *Areawide Plan* amendment requests, plus the proposed project (termed "Santa Clarita Valley Cumulative Buildout Scenario"); and

Scenario 3 Buildout of the CSDLAC Facilities Plan for the Santa Clarita Valley Sanitation District.

a. DMS Buildout Scenario

The County General Plan DMS methodology uses sanitation districts as the area of analysis for wastewater treatment. The ~~Newhall Ranch County Sanitation District~~new NRCSD, which was formed effective July 27, 2006, is generally outside the sphere of influence of any existing district and has

boundaries contiguous with the boundary of the Specific Plan. The County DMS analysis for the district reflects a capacity of 6.8 mgd for the Newhall Ranch Specific Plan, sufficient to accommodate Specific Plan wastewater flows. Should future development occur within the expected tributary area[14] of the Newhall Ranch WRP and request to be annexed to the new sanitation district, the new development projects also would be included in the County's DMS. The formation of a service district does not create any environmental impacts that were not previously analyzed in the certified Newhall Ranch Specific Plan Program EIR. As a result, the proposed project's cumulative impacts under this scenario would be less than significant.

b. Santa Clarita Valley Cumulative Buildout Scenario

The Santa Clarita Valley (SCV) Cumulative Buildout Scenario entails buildout of all lands under the current land use designations indicated in the Los Angeles County Santa Clarita Valley Areawide Plan and the Los Angeles County General Plan, plus the proposed project, plus all known active pending General Plan Amendment requests in the unincorporated area of Santa Clarita Valley and in the City of Santa Clarita. **Table 4.9-2, Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario**, depicts the projected future development activity in the Valley with and without the proposed project. Utilizing loading factors provided by the CSDLAC, under this buildout scenario, there would be an additional cumulative wastewater generation of 59.3 mgd. See **Table 4.9-3, Wastewater Generation Impact Analysis – SCV Cumulative Buildout Scenario**, for the detailed breakdown of SCV Cumulative Buildout Scenario wastewater calculations.

As previously discussed, the two existing Saugus and Valencia WRPs currently have a combined treatment capacity of 28.1 mgd, and would have a total projected 20~~15~~33 capacity of approximately 34.2 mgd of wastewater. Using CSDLAC loading factors, buildout of the service areas of these two WRPs would increase the amount of wastewater generated in the SCVSD to 56.02 mgd, which is 21.82 mgd more than the proposed 20~~33~~~~15~~ SCVSD expansion of 34.2 mgd.

As stated earlier, numerous safeguards exist within the County's project approval process to ensure available treatment capacity for new development within the service areas of CSDLAC, such as connection fees to pay for the full cost of facility expansions (including increasing water reclamation plant capacity). Although some amount of development in the Santa Clarita Valley would utilize on-site septic or package treatment facilities, it is expected that most of the buildout wastewater would be treated at CSDLAC plants. If buildout of the Santa Clarita Valley was permitted to occur without provision of additional treatment capacity at either the Saugus and Valencia WRPs or another site, significant wastewater disposal impacts would occur. However, with the County's safeguards in place that ensure

14 Areas that flow by gravity to the approved Newhall Ranch WRP and which are outside the spheres of influence of the SCVSD.

no connections permits are issued if capacity is not available, no significant cumulative wastewater treatment impacts would occur.

Table 4.9-2
Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario
(Project Scenario)

Land Use Types	Cumulative Buildout w/o Project[1]	Project	Cumulative Buildout w/ Mission Village[1]
Single-Family	93,412 du	382 du	93,794 du
Multi-Family	47,621 du	4,030 du	51,651 du
Mobile Home	2,699 du		2,699 du
Commercial Retail	18,866,030 sq. ft.	1,555,100 sq. ft.	20,421,130 sq. ft.
Hotel	2,071 room		2,071 room
Sit-Down Restaurant	283,790 sq. ft.		283,790 sq. ft.
Fast Food Restaurant	23,600 sq. ft.		23,600 sq. ft.
Movie Theater	3,300 seats		3,300 seats
Health Club	54,000 sq. ft.		54,000 sq. ft.
Car Dealership	411,000 sq. ft.		411,000 sq. ft.
Elem./Middle School	278,590 students	1,156 students	279,529 students
High School	12,843 students	321 students	13,120 students
College	29,948 students		29,948 students
Hospital	247,460 sq. ft.		247,460 sq. ft.
Library	171,790 sq. ft.	36,000 sq. ft.	231,790 sq. ft.
Church	501,190 sq. ft.		501,190 sq. ft.
Day Care	785,000 sq. ft.		785,000 sq. ft.
Industrial Park	41,743,950 sq. ft.		41,743,950 sq. ft.
Business Park	8,424,330 sq. ft.		8,424,330 sq. ft.
Manufact./Warehouse	3,932,470 sq. ft.		3,932,470 sq. ft.
Utilities	1,150,240 sq. ft.		1,150,240 sq. ft.
Commercial Office	6,380,520 sq. ft.		6,380,520 sq. ft.
Medical Office	133,730 sq. ft.		133,730 sq. ft.
Golf Course	1,209.0 ac		1,209.0 ac
Developed Parkland	467.8 ac	25.0 ac	492.8 ac
Undeveloped Parkland	1,000.0 ac		1,000.0 ac
Special Generator[2]	413.0 sg		413.0 sg

du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator

[1] *Santa Clarita Valley Consolidated Traffic Model (November 2002). Includes existing development, buildout under the existing City of Santa Clarita General Plan, Santa Clarita Valley Area Plan, and active pending General Plan Amendment requests.*

[2] *Includes Wayside Honor Ranch, Six Flags Magic Mountain, Travel Village, CHP Office, and Aqua Dulce Airport.*

Table 4.9-3
Wastewater Generation Impact Analysis – SCV Cumulative Buildout Scenario

Land Use	Cumulative Buildout w/ Mission Village[1]	Generation Factor (gpd)	Generation (mgd)
Single Family	93,794 du	260/du	24.386
Multi-Family	51,651 du	195/du	10.072
Mobile Home	2,699 du	195/du	0.526
Commercial Retail	20,421,130 sq. ft.	100/tsf	2.042
Hotel	2,071 room	125/room	0.259
Sit-Down Restaurant	283,790 sq. ft.	1,000/tsf	0.284
Fast Food Restaurant	23,600 sq. ft.	1,000/tsf	0.024
Movie Theater	3,300 seats	3.788/seat[1]	0.013
Health Club	54,000 sq. ft.	600/tsf	0.032
Car Dealership	411,000 sq. ft.	100/tsf	0.041
Elem./Middle School	279,529 students	20/student	5.591
High School	13,120 students	20/student	0.262
College	29,948 students	20/student	0.599
Hospital	247,460 sq. ft.	250/tsf[2]	0.062
Library	231,790 sq. ft.	50/tsf[3]	0.012
Church	501,190 sq. ft.	50/tsf	0.025
Day Care	785,000 sq. ft.	200/tsf	0.157
Industrial Park	41,743,950 sq. ft.	25/tsf	1.044
Business Park	8,424,330 sq. ft.	200/tsf	1.685
Manufact./Warehouse	3,932,470 sq. ft.	25/tsf	0.098
Utilities	1,150,240 sq. ft.	25/tsf	0.029
Commercial Office	6,380,520 sq. ft.	200/tsf	1.276
Medical Office	133,730 sq. ft.	300/tsf	0.040
Golf Course	1,209.0 ac	4,356/ac	5.266
Developed Parkland	503.5 ac	4,356/ac	2.193
Undeveloped Parkland	1,000.0 ac	N/A	0
Special Generator	413.0 sg	N/A	0
Total			**56.018**

Source: Impact Sciences, Inc.
Notes:
du = dwelling unit; sq. ft. = square feet; sta = staff; ac = acres; sg = special generator; tsf = thousand square feet
[1] *Assumes 30 square feet per seat.*
[2] *Assumes 500 square feet per hospital bed.*
[3] *Uses same number as Church.*

c. County Sanitation Districts of Los Angeles County Facilities Plan for the Santa Clarita Valley Sanitation District

CSDLAC has prepared a Facilities Plan, with a horizon year of 2015, for the SCVSD that was approved in January 1998. The Facilities Plan will estimate future wastewater generation for the probable future service area of the SCVSD in order to anticipate future treatment capacity and wastewater conveyance needs. Unlike this EIR, which estimates future wastewater generation based on the buildout of land uses within the Santa Clarita Valley Area Plan and City of Santa Clarita General Plan, plus known active pending General Plan Amendments, the CSDLAC Facilities Plan bases its projections for wastewater generation on the SCAG 1996 Regional Transportation Plan. The Facilities Plan uses a residential and commercial wastewater generation rate of 101 gallons per capita per day, plus projected industrial wastewater and contracted entitlement flow. The Facilities Plan, which was approved prior to the County's approval of the Specific Plan, also assumes that if the Specific Plan is approved, its wastewater would be treated at the Newhall Ranch WRP, rather than by the SCVSD. According to CSDLAC estimates, total flows projected from the Santa Clarita Valley in 20~~15~~33, exclusive of the Specific Plan, would be 34.2 mgd.[15] ~~The projected site capacity of the Saugus and Valencia WRPs will be a total of 34.2 mgd by the year 2015.[16]~~ In addition, SCVSD does not expect to exceed a daily capacity of 34.2 mgd because connection permits will not be issued that would exceed this amount. According to recent SCVSD flow projects based on the SCAG 2008 Regional Transportation Plan, the previously approved Stage VI expansion at the Valencia WRP is not expected to be needed until approximately 2021 and the site buildout capacity of 34.2 mgd is not expected to be reached until approximately 2033. Consequently, the planned short-term use of the Valencia WRP to treat ~~1.13~~0.96 mgd of the project's wastewater is expected to have no impact on future expansion of the SCVSD facilities. In addition, as describe under "Project Impacts" above, the Valencia WRP would be able to accommodate the approximately 0.266 mgd of wastewater from the project that will permanently be treated at this facility. Because future project flows will be directed to the Newhall Ranch WRP, and because safeguards are in place that ensure no SCVSD connection permits are issued if capacity is not available, the proposed project would not result in significant cumulative impacts on the SCVSD under this scenario.

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15 CSDLAC comment letter to Carolina Blengini, Los Angeles County Department of Regional Planning, dated November 17, 2010.~~CSDLAC comment letter to Daniel Fierros, Department of Regional Planning, dated January 22, 2007.~~

16 Preliminary WRP Site Capacity Evaluations for the SCVSD, County Sanitation Districts of Los Angeles County, 1996.

9. CUMULATIVE MITIGATION MEASURES

Cumulative development would be required to implement similar mitigation as the proposed project, if necessary, determined on a project specific basis. Therefore, no additional mitigation is recommended or required in the context of this project.

10. SIGNIFICANT UNAVOIDABLE IMPACTS

a. Project-Specific Impacts

Provided that proposed mitigation measures are properly implemented, no significant unavoidable impacts are expected to result from implementation of the proposed project.

b. Cumulative Impacts

Provided that mitigation measures are properly implemented, no significant unavoidable cumulative impacts are expected to result from implementation of the proposed project.

modification of traffic patterns, any safety issues posed by dirt movers in proximity to the SR-126, and include requisite traffic control assistance for the CHP. The traffic management plan would then be reviewed and approved by the Los Angeles County Department of Public Works and/or Caltrans prior to issuance of construction permits.

With implementation of private security services, CHP traffic control services, and the County/Caltrans traffic management plan, potentially significant construction-related impacts to police protection services that may occur as a result of the Mission Village project would be reduced to a less than significant level.

(2) Operational Impacts

(a) Los Angeles County Sheriff's Department

The County of Los Angeles Sheriff's Department would have the responsibility to provide general law enforcement services to the project site. It is anticipated that demand for these services in the project area would increase above current levels upon buildout of the project, and that the number of service calls and the types of incidents at the project site would be similar in frequency and character to those experienced in other areas of the Santa Clarita Valley.

The Sheriff's Department anticipates that the non-emergent response time to a request for service to the proposed Project would be approximately 20 to 35 minutes. The priority response time would be approximately 8 to 12 minutes and the response time under emergent circumstances would be approximately 5 to 7 minutes. All response times are approximations and would be dependent on both the deployment of area radio cars and traffic conditions. As noted above, the project proposes a total residential population of 10,802. Based upon the ideal ratio of one deputy per 1,000 residents, the project would require 11 additional deputies. The Sheriff now estimates that the proposed project would have approximately 13,778 residents resulting in the need for an additional 13 officers. Additionally, according to the Sheriff's Department, the increase in required deputies would necessitate an increase in support resources, such as detectives, front desk personnel, secretaries, administration, vehicles, and portable radios.[28] Without additional Sherriff's Department staffing and facilities, the predicted population increase associated with the Mission Village project would decrease the existing level of service of the Sheriff's Department and would result in a significant impact.

Capital facilities and equipment would be funded by the law enforcement facilities fee, discussed above. The law enforcement facilities fee would provide sufficient revenues to pay for land acquisitions,

28 Written correspondence from Captain Patti A. Minutello, Los Angeles County Sheriff's Department, Santa Clarita Valley Station, August 4, 2004..

engineering, construction, installation, purchasing, and other costs for the provision of capital law enforcement facilities and equipment needed to serve new development in the unincorporated Santa Clarita Valley. Additional operational funding for the Sheriff's Department in the Santa Clarita Valley area and the rest of Los Angeles County would be derived from various types of tax revenues (e.g., property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees), which are deposited in the County's General Fund. The County Board of Supervisors then allocates the revenue for various public

MV 4.11-4 Prior to the issuance of building permits or certificates of occupancy as applicable, the project applicant, or its designee, shall pay to the County the applicable law enforcement facilities fee required by Los Angeles County Code section 22.74.010, et seq., or, in the alternative, shall enter into an agreement with the County for the in lieu payment of such fees.

MV 4.11-5 Prior to the issuance of building permits or certificates of occupancy as applicable, the project applicant, or its designee, shall incorporate the following crime prevention measures into the proposed Project:

- Provide lighting in open areas and parking lots;
- Ensure the visibility of doors and windows from the street;
- Ensure that the required building address numbers are lighted and readily apparent from the street for emergency response agencies;
- Provide knox box entry key system for law enforcement if a gated community, gated apartments or gated town homes are planned in the project boundary.

8. CUMULATIVE IMPACTS

In order to analyze the cumulative impacts to law enforcement services of this project in combination with other expected future growth, the amount and location of growth expected to occur with buildout of the Santa Clarita Valley, in addition to that of the Mission Village project, was forecast. The Santa Clarita Valley Cumulative Buildout Scenario entails buildout of all lands under the current land use designations indicated in the Santa Clarita Valley Area Plan and County General Plan, the proposed project, and all known pending General Plan Amendment requests for additional urban development in the unincorporated area of the Santa Clarita Valley and the City of Santa Clarita. A list of the future development activity (with and without the project) expected in the valley under the Santa Clarita Valley Cumulative Buildout Scenario is presented below in **Table 4.11-1, Cumulative Development Activity – Santa Clarita Valley Cumulative Buildout Scenario**.

Excluding the proposed project, the total residential population within the valley under this buildout scenario would be 416,395 persons. With the Mission Village project, this total resident population would be 427,197 persons.[41]

41 Household estimates are based upon estimates provided by the County of Los Angeles of 3.17 persons per single-family dwelling and 2.38 persons per multi-family dwelling, per apartment, and per mobile home.

a. Los Angeles County Sheriff's Department

Using the desired officer-to-population ratio of one officer per 1,000 population, Santa Clarita Valley buildout (exclusive of the project) would require a total of 416 sworn officers, or 255 more sworn officers than currently work in the valley. The proposed project would increase this total by an additional 11 sworn patrol officers. Meanwhile, for purposes of this analysis, it is assumed that the deputy-to-resident ratio would be at the desired ratio of one officer per 1,000 population, and that each development project would be responsible to ensure that adequate law enforcement services are available. Therefore, if no officers are hired to accommodate the needs of the region as it builds out, a significant cumulative impact would occur.

4.12 FIRE PROTECTION SERVICES

1. SUMMARY

Fire protection and emergency medical response services for the Mission Village project and surrounding area are provided by the County's Fire Department. ~~Fourteen~~ Thirteen fire stations and ~~three~~ four fire camps currently provide fire protection services for the project area. The closest station to the project site that would provide fire protection services is Fire Station 76, located at 27223 Henry Mayo Drive in Valencia. Should a significant incident occur, the resources of the entire Fire Department, not just the station closest to the site, would be available to serve the project. The County's Fire Department and a franchise private ambulance company also provide paramedic services to the area.

The Mission Village project site is located in an area that has been designated as a Very High Fire Hazard Severity Zone (formerly called Fire Zone 4) by the County Fire Department, which denotes the County Forester's highest fire hazard potential.

Pursuant to mitigation adopted by the County as part of its approval of the Newhall Ranch Specific Plan, and project specific mitigation proposed by this EIR, the applicant is currently in discussions with the County's Fire Department with respect to a memorandum of understanding (MOU) for Newhall Ranch, Entrada, and Legacy Village, which collectively, comprise "the Project Area" for the MOU, which would result in the construction of additional fire stations on the Newhall Ranch site, generally, and specifically a new fire station on the Mission Village site. ~~It is expected that~~A ~~the additional~~ fire station is to be constructed on the Mission Village site (Fire Station 177) that would ultimately provide fire protection services for the Mission Village site. ~~The project applicant intends to complete construction of Fire Station 177 such that the station is operational upon issuance of the 5,000th certificate of occupancy for the Project Area as defined in the MOU.~~ Until such time as that station is completed, existing Fire Stations 76 and 124 would be available to serve the project site.

Additionally, the proposed project would be required to meet all County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project. As a result, the project would not diminish the staffing or response times of existing fire stations in the Santa Clarita Valley, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels. Therefore, with implementation of the adopted Specific Plan mitigation measures, in combination with the recommended project-specific mitigation, the proposed project would not have a significant project-specific or cumulative impact on fire protection services or fire hazards in Santa Clarita Valley.

In response to the identified significant impacts, the Final Newhall Ranch Specific Plan Program EIR identified four feasible mitigation measures.[1] The Board of Supervisors found that adoption of the recommended mitigation measures would reduce the identified potentially significant effects to less than significant levels. The Specific Plan's mitigation program for fire protection services and fire hazards includes the following requirements: (1) approval of a Wildfire Fuel Modification Plan for each Newhall Ranch final subdivision map that permits construction in development areas adjacent to Open Area and the High Country Special Management Area (SMA); (2) provisions in each tentative subdivision map and site plan for sufficient fire flow capacity for all proposed residential and non-residential uses; (3) subdivision map and site plan compliance with all applicable building and fire codes and hazard reduction programs for Moderate Fire Hazard Zones or Very High Fire Hazard Severity Zones; (4) provisions for funding the three fire stations in lieu of developer fees, the dedication of two fire station sites, and providing for various equipment needs; and (5) provisions for a MOU with the Fire Department to address first-phase fire protection requirements and the criteria for timing the development for each of the three fire stations.[2] The MOU requirement specified that delivery of fire service for Newhall Ranch would be from either existing fire stations, or one of the three fire stations to be provided pursuant to the Specific Plan's mitigation program. Prior to commencement of the operation of any of the three fire stations, the MOU requirement contemplated that fire service may be delivered to Newhall Ranch from existing fire stations or from temporary fire stations to be provided by the developer at mutually agreed-upon locations. Planned permanent stations located within Newhall Ranch would replace the temporary fire stations.

4. EXISTING CONDITIONS

a. Fire Protection Services

The County's Fire Department provides fire protection service to the project area. ~~Fourteen~~ Thirteen fire stations and ~~three~~ four fire camps support the project area. The location of these stations, the fire suppression camps, temporary fire stations, and fire stations with paramedic units, are illustrated on **Figure 4.12-1, Existing Fire Station Locations**.

Also shown on **Figure 4.12-1** is the location of the existing ~~fire station at the~~ Del Valle Training Facility, which is located west of the project site. The closest fire station to the project site is Fire Station 76, located at 27223 Henry Mayo Drive in Valencia, approximately 0.27 mile from the northern boundary of the

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1 Mitigation Measures 4.18-1 through 4.18-4 in both the certified Final Program EIR (March 9, 1999) and adopted Mitigation Monitoring Plan for the Specific Plan (May 2003).

2 See Mitigation Measure 4.18-4 in both the certified Newhall Ranch Program EIR (March 9, 1999) and adopted Mitigation Monitoring Plan for the Specific Plan (May 2003).

Mission Village project site. The second closest fire station to the project site is Fire Station 124, located at 25870 Hemingway Avenue in Stevenson Ranch, approximately 1.3 miles from the southeastern boundary of the project site. These distances translate into response times ranging from approximately 5 to 8 minutes for Mission Village as a whole. The closest available district response units would provide fire protection services. Should a significant incident occur, the resources of the entire Fire Department, not just the stations closest to the site, would serve the project site.

Fire suppression camps supply crews on a daily basis to assist in the suppression of wildland fires. They also perform storm-related functions, such as the filling of sandbags, and provide additional manpower at search and rescue incidents. Of the four camps located in the Santa Clarita Valley area, two are staffed with paid fire suppression aids, and the other two are staffed by a workforce comprised of adult male prisoners provided by the California Department of Corrections (CDC). This partnership with the CDC provides the Fire Department with a large labor pool. The closest fire suppression camp to the project site is located at 29300 The Old Road in Saugus.[3]

A description of the operational characteristics of the four fire stations closest to the site and, therefore, most likely to respond to fire and medical emergencies, is provided below. A three-person fire company consists of a captain, a fire fighter specialist, and a fire fighter.[4] A four-person fire company has one additional fire fighter. If the station houses a paramedic squad, a paramedic fills one fire fighter position on the engine. There are no plans for upgrades to ~~seven~~ 10 of the ~~11~~13 fire stations located in the vicinity of the project site; however, Station 156 has commenced (as of April 2010) construction for the development of a permanent station and is expected to be operational the second quarter of 2011.[5]

(1) Los Angeles County Fire Station 76

Los Angeles County Fire Station 76 is located at 27223 Henry Mayo Drive in Valencia. The station maintains ~~one fire engine and is supported by four firefighters.[6] A five person hazardous materials unit is located at this station.[7]~~ Aa nine person Hazardous Materials Task Force comprised of a four person engine company and a five person hazardous materials squad that provides full fire protection services, hazardous materials-related and otherwise.

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3 Electronic communication, Lorraine Buck, Planning Division, County of Los Angeles Fire Department, March 27, 2009.

4 Written correspondence between Loretta Bagwell, Planning Analyst, Planning Division, Los Angeles County Fire Department, and Impact Sciences, April 7, 2010. If the fire station has a paramedic squad, the 3-person engine company would consist of a captain, a fire fighter specialist, and a fire fighter/paramedic. The same would hold true for a 4-person engine company; one fire fighter would be replaced with a fire fighter/paramedic.

5 Written correspondence between Loretta Bagwell and Impact Sciences, April 7, 2010.

~~6 Telephone communication, Lorraine Buck, Planning Division, County of Los Angeles Fire Department, February 3, 2009.~~

~~7 Telephone communication, Lorraine Buck, February 3, 2009.~~

e. Current Site Conditions

The Mission Village project site is currently vacant with some irrigated agricultural uses and abandoned oil and gas operations. Previous uses of the site include cattle grazing operations.

The topography of the Mission Village project site varies considerably, with mesa areas located sporadically along the Santa Clara River, and moderately to steeply sloping terrain in the central and southern portions of the site. Access roads through the project area consist primarily of dirt roadways with some paved roads that are generally in good to poor condition. Vegetation communities located in the project area include disked farm fields; habitat communities include, among others, non-native grassland, upland scrub habitat and sensitive riparian habitat. Please refer to **Section 4.3, Biota**, of this EIR for additional information on the existing biological resources on the Mission Village site, and **Section 2.0, Environmental and Regulatory Setting**, for additional discussion of the current conditions on the Mission Village project site.

There was one call for service during the year 2009, for a wildland fire that occurred approximately 4 miles north of the Mission Village project site.[26]

5. PROPOSED PROJECT IMPROVEMENTS

The project proposes to develop a total of 4,412 residential dwelling units consisting of 382 single-family homes, 4,030 multi-family units, including attached and detached condominiums, age qualified, and apartment units, with a total residential population of 10,802.[27] To facilitate development of the Mission Village tract map site (VTTM 61105), several off-site, project-related improvements (i.e., improvements outside the tract boundary) would be developed on an additional 592.3 acres of land. These project-related components include the following: utility corridor, Magic Mountain Parkway roadway extension, a water quality basin, three water tanks (portions of two water tanks would be located on site), a Southern California Edison electrical substation, conversion of an existing water tank to recycled water tank, and grading associated with construction of the southerly extension of Westridge Parkway. The project would also include 1.555 million square feet of commercial/mixed uses, a 9.5-acre elementary school, fire station, public library, bus transfer station, parks, public and private recreational facilities, trails, and road improvements. The proposed Mission Village fire station would be located south of Magic Mountain Parkway near the intersection of Magic Mountain Parkway and ~~Westside~~ Westridge Parkway. **Figure 4.12-2, Proposed Fire Station Locations**, illustrates the approximate locations of the fire stations to

26 Telephone communication, Loretta Bagwell, Planning Division, Los Angeles County Fire Department, February 18, 2010.

27 Based upon County of Los Angeles estimates of 3.17 persons per single-family household and 2.38 persons per multi-family households.

be constructed pursuant to the MOU presently being negotiated between Newhall Land and the Fire Department. ~~in connection with the Newhall Ranch Specific Plan, including the Mission Village fire station.~~

6. PROJECT IMPACTS

The analysis of potential impacts to fire protection services associated with construction and operation of the proposed project, including the significance criteria applicable to assessing such impacts, is presented below.

a. Significance Threshold Criteria

According to Appendix G of the *California Environmental Quality Act (CEQA) Guidelines*, a project would have a significant impact on fire protection services if the project would result in

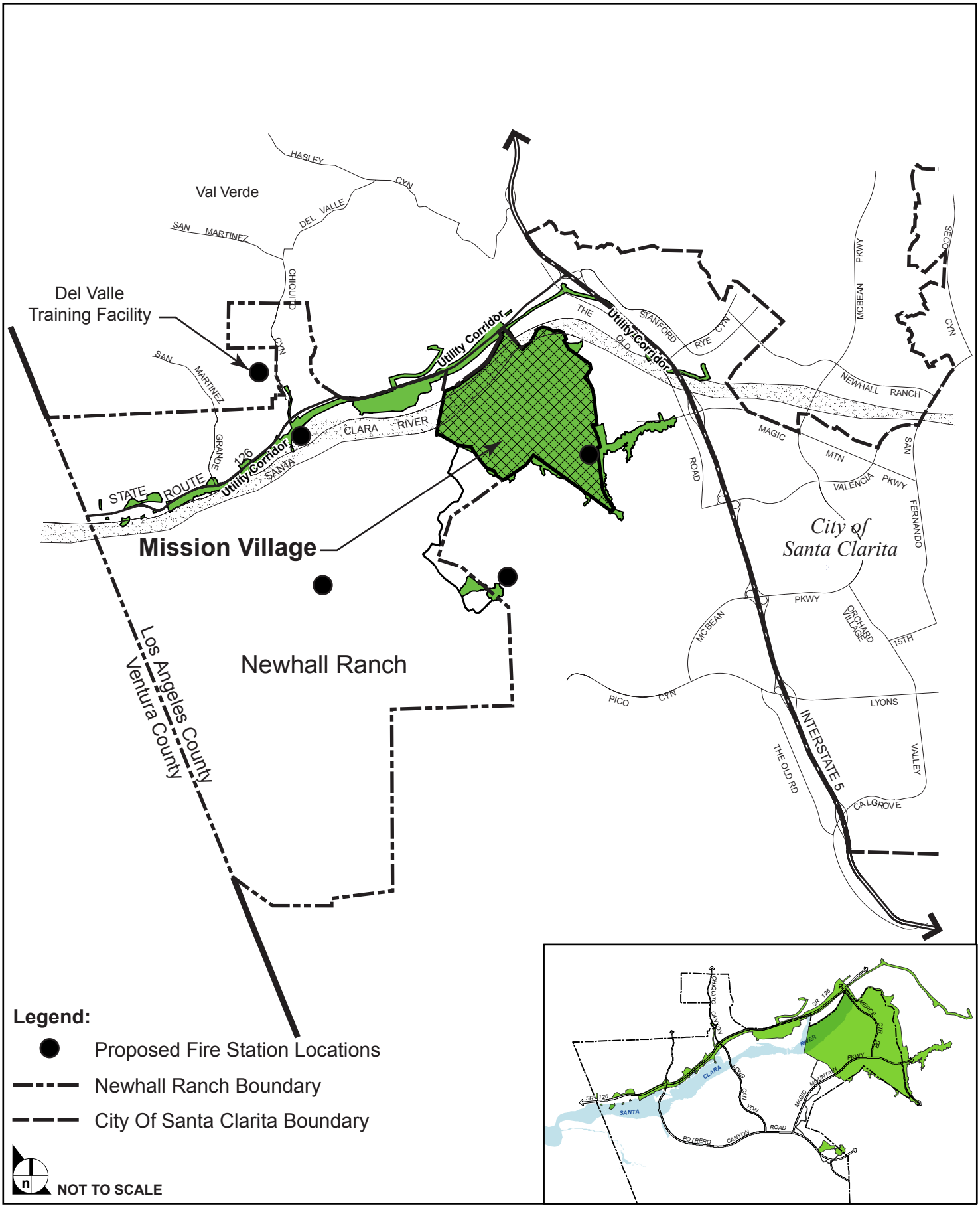
- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities;
- The need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildfires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

These are the significance criteria to be applied in assessing the potential impacts of the proposed project.

b. Impact Analysis

(1) Construction-Related Impacts

Construction projects result in a variety of operations that have the potential to increase the risk of fire, such as the use of mechanical equipment in vegetated areas, cutting and grinding metal, welding, and the storage of flammable materials such as fuel, wood and other building materials. A large amount of wood framing would occur on the project site during buildout. In association with the wood framing operations, the project's electrical, plumbing, communications, and ventilation systems would be installed in each structure. Although rare, fires do occur at construction sites, and it is expected that the electrical, plumbing, and mechanical systems for the development would be properly installed during framing operations. Installation would be subject to County codes and inspection by County personnel prior to drywalling. In addition, construction sites would also be subject to County requirements relative to water availability and accessibility to fire-fighting equipment. Compliance with County Code requirements would assist in mitigating potential fire-related impacts to a level below significant.



SOURCE: Impact Sciences, Inc. – May 2011

FIGURE **4.12-2**

Revised Proposed Fire Station Locations

32-99•05/11

The project could increase the existing rate of calls for service because portions of the development would be located adjacent to natural areas, particularly along the southern, western, and northern edges of the tract map site that have wildfire potential. The applicant, however, must prepare a Fuel Modification Plan pursuant to Section 1117.2.1 of the Fire Code that would retard the spread of wildfire into development areas until the Fire Department's arrival at the site. Moreover, the site is located within an existing service area and the Fire Department indicates that response times within the project region are within the Department's adopted service standards of 5 minutes for basic life support and 8 minutes for advanced life support. Because the project includes the provision of a fire station north of Magic Mountain Parkway at the intersection of Magic Mountain Parkway and Westridge Parkway, it is expected that the response times at project buildout will continue to meet the Department's adopted service standards. Until such time as the Mission Village station is completed, Fire Station 76 and Fire Station 124~~156~~ would serve the project site.[28] Response times would meet the adopted service standards.

The provision of a fire station as part of the Mission Village project is consistent with the adopted mitigation measures for the Specific Plan, which require that the project applicant, in lieu of the payment of developer fees, provide funding to the County Fire District for the construction of three fire stations, two of which would be located on the Specific Plan site and the third at the Del Valle Training Facility, just outside the Specific Plan boundary. The adopted mitigation also provides that Newhall and the Department enter into a MOU that will set forth the first-phase fire protection requirements (fire protection plan) and the criteria for timing the development of each of the three fire stations. The fire protection plan component of the MOU also will undergo annual review and modification, if necessary. Based in part on the mitigation, the Specific Plan EIR determined that potential impacts to fire protection services would be reduced to levels below significant. The applicant is currently working with the Fire Department to develop the specific items to be covered under the MOU, which would be completed prior to the issuance of any certificate of occupancy. In consideration of the applicant's planned development of the Specific Plan Entrada, and Legacy Village, the applicant and the Fire Department presently are considering the development of four fire stations to serve the area, rather than three. The following are the main points of the draft MOU presently being considered:

- The applicant would construct, improve, and equip four fire stations, each no smaller than 9,600 gross square feet (gsf) in size, and would convey the four fire stations, including the underlying land, to the Fire Department upon completion (the Mission Village station would be 13,500 gsf with a 3,600 gsf apparatus storage building).

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28 Written correspondence between John R. Todd, Chief, Forestry Division, Prevention Bureau, Los Angeles County Fire Department and Daniel Fierros, Planning Assistant, Department of Regional Planning, Impact Analysis Section, January 3, 2008.

(c) Fire Codes and Guidelines

As indicated above under the "Existing Conditions," all projects must adhere to applicable state and County Fire codes, standards, and guidelines. Mitigation is proposed further requiring compliance with applicable County requirements. As the project builds out, the fire codes, standards, and guidelines would be continually updated by the state and County agencies as knowledge gained from past fires increases.

(d) Conclusion

The proposed project would ultimately be served by ~~three~~ four Newhall Ranch area fire stations, including three on Newhall Ranch with one within Mission Village, and a fourth station in the immediate vicinity (i.e., within Legacy Village), to be funded and constructed by the project applicant in lieu of developer fees pursuant to the MOU presently being negotiated between Newhall Land and the Fire Department ~~and which is required by mitigation proposed by this EIR~~. ~~As required by the mitigation,~~ Under the MOU, the project applicant also would dedicate land for the ~~three~~ four fire station sites ~~in Newhall Ranch~~, and provide payment for the cost of designated equipment needs.

Mitigation adopted as part of the Specific Plan requires that the project applicant provide funding for three fire stations, and mitigation recommended by this EIR requires that the applicant construct and equip a fire station on the Mission Village site. As noted above, with construction of the Mission Village fire station, in combination with the other proposed mitigation measures summarized below, the impact of the Mission Village site on fire protection in the project vicinity would be reduced to a level below significant. (~~s~~See **Figure 4.12-2**, ~~and~~ Specific Plan EIR **Mitigation Measure 4.18-4,** and Mission Village **Mitigation Measure MV 4.12-2**). Additionally, mitigation is proposed requiring the project to implement a Wildfire Fuel Modification Plan, and meet County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operation phases. The required MOU will also address the first-phase fire protection requirements (fire protection plan) and the criteria for developing each of the three fire stations for the Newhall Ranch Specific Plan. As a result, the project would neither diminish the staffing or the response times of existing fire stations in the Santa Clarita Valley, nor would it create a special fire protection requirement on the site that would result in a decline in existing services levels in the valley. Additionally, mitigation is proposed requiring that the project meet minimum water flow requirements and applicable Fire Department access requirements. Therefore, with implementation of the proposed mitigation measures, potential impacts to fire protection services and fire-related hazard impacts associated with both the operation and construction of the proposed project would be reduced to below a level of significance.

7. PROJECT MITIGATION MEASURES

Although the proposed Mission Village project may result in potentially significant impacts related to fire protection services absent mitigation, the County previously adopted mitigation measures required to be implemented as part of the Newhall Ranch Specific Plan that would reduce these impacts to below significant at the program level of review. These mitigation measures, as they relate to fire protection services, are found in the previously certified Newhall Ranch Program EIR and adopted Mitigation Monitoring Plan for the Specific Plan (May 2003). In addition, this EIR identifies recommended mitigation

MV 4.12-5 This property is located within the area described by the Forester and Fire Warden as a Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ). All applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance and fuel modification plans, must be met.

MV 4.12-6 Specific fire and life safety requirements for the construction phase will be addressed at the building fire plan check. There may be additional fire and life safety requirements during this time.

MV 4.12-7 Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width and indicated on the Tentative or Exhibit "A" maps. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.

MV 4.12-8 Access roads shall be maintained with a minimum of 10 feet of brush clearance on each side. Fire access roads shall have an unobstructed vertical clearance clear-to-sky with the exception of protected tree species. Protected tree species overhanging fire access roads shall be maintained to provide a vertical clearance of 13 feet, 6 inches. Applicant to obtain all necessary permits prior to the commencement of trimming of any protected tree species.

MV 4.12-9 The maximum allowable grade shall not exceed 15 percent except where topography makes it impractical to keep within such grade; in such cases, an absolute maximum of 20 percent will be allowed for up to 150 feet in distance. The average maximum allowed grade, including topographical difficulties, shall be no more than 17 percent. Grade breaks shall not exceed 10 percent in 10 feet.

MV 4.12-10 Requirements for access, fire flows and hydrants are to be addressed at the Los Angeles County Subdivision Committee meeting during the subdivision tentative map stage.

MV 4.12-11 Fire sprinkler systems shall be installed ~~are required~~ in ~~some~~ residential and ~~most~~commercial occupancies consistent with applicable code and ordinance requirements. For those occupancies not requiring fire sprinkler systems, it is encouraged that fire sprinkler systems be installed. This will reduce potential fire and life losses.

MV 4.12-12 Prior to construction, the following items shall be addressed:

a. Installation and inspection of the required all weather access to be provided as determined by either the tentative map review process or building permit issuance.

b. Fire hydrants shall be installed and tested prior to the clearance for the commencement of construction.